Recd 12/10
Certified
-15

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

CERTIFIED - RETURN RECEIPT REQUESTED

12/05/01

U. S. Army Corps of Engineers
c/o Mr. Richard E. Bonner, P.E.
Jacksonville District
Post Office Box 4970
Jacksonville, Florida 32232-0019

File No. 0180701-001, Dade County
U.S. Army Corps of Engineers
Miami River Federal Channel Maintenance Dredging

Dear Mr. Bonner:

Enclosed is the Notice of Intent to Issue an Conceptual Environmental Resource (File No. 0180701-001) for the referenced application. The draft permit is enclosed.

Pursuant to Section 373.413(4), F.S., and paragraph 62-343.090(2)(k), F.A.C., you (the applicant) are required to publish at your own expense the enclosed notice of this Notice of Intent to Issue. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place.

The proof of publication shall be provided to the letterhead address (add Mail Station 300) within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time shall be grounds for denial of the permit and consent to use sovereign submerged lands.

If you have any additional questions, please contact me at (850) 487-4471, extension 141.

Sincerely,

Kent Edwards

Kent Edwards
Environmental Consultant
Office of Beaches and Coastal Systems

Attachments

copies (with attachments) furnished to:
Tim Rach, DEP, SE District
Patrick Krechowski, DEP, Office of General Counsel
David Mayer, DEP, CAMA
Inger Hansen, DEP, SE District
Mary Murphy, DEP, SE District
Geetha Selvendran, DEP, SE District
Paul Wierzbicki, DEP, SE District
Greg Graves, DEP, SE District
Mark Thompson, DEP, SE District
Doug Strom, DEP, SE District
Steve Wolfe, DEP, Div. of Resource Assess. and Mgmt.
Richard Tedder, DEP, Div. Waste Mgmt.
Gail Sloane, DEP, Div. Water Resource Mgmt.
David Hartman, FWCC, BPSM
Brad Riech, USFWS
Mike Johnson, NMFS
Susan Markley, Dade Co. DERM
David Miller, Miami River Commission
Ken Jones, PBSJ
Stacey Roberts, PBSJ
DEP, OBCS Permit Information Center
DEP, OBCS File

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Jeb Bush
Governor

David B. Struhs
Secretary

In the Matter of an
Application for a
Conceptual Environmental Resource Permit by:

APPLICANT:
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019

PROJECT NAME:
Miami River Federal Channel Maintenance Dredging

File No. 0180701-001-EC
Dade County

NOTICE OF INTENT TO ISSUE CONCEPTUAL ENVIRONMENTAL RESOURCE PERMIT

The Department of Environmental Protection gives notice of its intent to:

issue a conceptual environmental resource permit under Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.), and Section 62-343.060 F.A.C. (draft copy of permit attached). Issuance of the conceptual environmental resource permit also constitutes preliminary certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341;

Where applicable (such as activities in coastal counties), issuance of the conceptual environmental resource permit also constitutes a preliminary finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

I. DESCRIPTION OF THE PROPOSED ACTIVITY

The applicant, U.S. Army Corps of Engineers, applied on 10/08/01 to the Department of Environmental Protection for a Conceptual Environmental Resource Permit to maintenance dredge 877,500 cubic yards of material from the 5.5 mile length of the federal channel in the Miami River. The dredge material will be dewatered at an interim disposal site located near the upstream end of the project. The final dredged material disposal method will be determined based on chemical analysis of the dewatered material and its leachate, and will be consistent with regulations for the protection of surface and groundwater at the disposal site. If water quality standards cannot be maintained within 150 meters of the dredging or discharge points, a variance would be required to extend the standard mixing zone for the identified water quality parameters. This mixing zone shall not extend seaward of the mouth of the river. Existing water quality in the

Miami River is currently degraded. All reasonable efforts to minimize additional water quality impacts shall be taken, and only temporary impacts will be considered allowable. Mitigation for any further impacts to current water quality in the project area will be required, even if the impacts are temporary in nature.

The activity is located in the Miami River, within the City of Miami, Dade County, Sections 27, 28, 33, 34, 35 Township 53 South, Range 41 East and Section 38 Township 54 South, Range 41 East, Class III Waters, within the Biscayne Bay Aquatic Preserve, Outstanding Florida Waters.

II. AUTHORITY FOR REVIEW

The Department has permitting authority under Part IV of Chapter 373, F.S., and Chapters 62-330, 62-341 and 62-343, F.A.C. Pursuant to Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing this application.

III. BACKGROUND/BASIS FOR ISSUANCE

A. General

The original, natural channel of the Miami River was located completely within Dade County. The north fork of the river originated at the "Miami River Rapids", approximately 4.5 miles from the river mouth and Biscayne Bay. This feature impounded water flowing southeast from the Everglades. The south fork of the river originated in a similar manner approximately one-half mile south of the Miami River Rapids. In 1909, a new channel was cut, beginning approximately 100' north of the Miami River Rapids, and extending 80 miles to Lake Okeechobee. The Miami River Channel dredging project was authorized by congress in 1930. From 1931 through 1933 the USACE dredged the Miami River to create a navigation channel that extends from the mouth of the Miami River, for approximately 5.5 miles, to a salinity control structure near 36th St.

The navigable portion of the Miami River includes a channel from the mouth of the river that is 15 feet deep by 250 feet wide, tapering down to 170 feet wide at Brickell Point, 1400 feet from the mouth of the river. For the next 3 miles from the mouth of the river to the south fork, the channel is 150' wide (at the bottom) and –15' deep MLW. For the next 1.1 miles, from the south fork to Tamiami Canal, the bottom width of the channel is 125', with a depth of –12.5' MLW. For the last 1.4 miles, from Tamiami Canal to the Seaboard Railroad bridge, the bottom width is 90', with a depth of –12.5' MLW.

There has never been a maintenance dredging project on the river, and therefore there is no further dredging history.

The United States Congress has shown a continuing interest in improvements to the Miami River for navigation, pollution abatement and other purposes. Resolutions passed by the Senate (3/24/72) and House (6/14/72) adopted authorizations requiring the USACE to develop methods to address these concerns. The Water Resources Development Act (WRDA) of 1974 reaffirmed this commitment, by authorizing a feasibility study. WRDA 1986 further authorized the removal of river sediments, removal of abandoned vessels and establishment of the Miami River Water Quality Commission.

The original USACE feasibility study, initiated in 1974, concluded that the removal of contaminated sediments must be accompanied by non-Federal actions to control point and non-point source pollution from entering the river. In 1977, further study was halted, pending these non-federal actions. In 1985, after regulatory actions and facility upgrades were initiated, the study was resumed, and subsequently a draft Feasibility Report was distributed for review. The report concluded that no quantifiable National Economic Development Benefits could be associated with the sediment removal project. The USACE therefore recommended that the project not be pursued. There was almost unanimous objection to these findings, citing economic and environmental reasons. In response to overwhelming public support, WRDA 1986 authorized a new study, and an Environmental Assessment was completed in 1990. This study again found that there was no justification for sediment removal based on water quality or navigation, but concluded that maintenance dredging was necessary in order to restore more efficient use of the channel by deep draft vessels.

The two main reasons for dredging the Miami River, as described in the City of Miami, Miami River Master Plan (1992) and the USACE Draft Environmental Impact Statement (Dec. 2000) are navigation and environmental concerns. The US Coast Guard has stated that an unacceptable safety hazard exists due to the current shoaling. The small channel requires special handling of vessels by tugs, and when fully loaded, many ships can only navigate the river during high tides. This could lead to an economic effect due to the relocation of shipping interests to other competing ports.

Runoff from the agricultural areas around Lake Okeechobee and the Everglades drains through the Miami Canal into the Miami River. The river also receives extensive industrial, commercial, and residential drainage from both upstream and downstream of the salinity barrier. Though there have been many improvements to address point sources of pollution in the area, river sediments still contain heavy metals, petroleum hydrocarbons, and other organic contaminants. These compounds leach into surface water, are resuspended by river traffic, and are washed away by stormwater flows, where they are transported into Biscayne Bay. Resource management agencies, including FWC and the U.S. Park Service have expressed concerns about contamination that has been found in Biscayne Bay sediments, and linked to the Miami River sediments as the source. It has been reported that the dead zone for seagrasses in Biscayne Bay, around the mouth of the

Miami River, continues to expand (USACE Draft EIS, 2001), with the nearest seagrasses currently located approximately one-quarter mile from the river mouth.

The USACE applied for an Environmental Resource Permit (ERP) on 2/21/01, to maintenance dredge 877,500 c.y. of material from the federal channel in the river. The project entails no deepening or widening of the channel beyond the original design specifications. The thickness of the sediment layer ranges from 1 to 10 feet, with the thicker areas located along the sides of the channel. Given the high degree of contamination and toxic nature of the sediments, the Department expressed concerns about mobilization of the contaminants during the dredging and disposal operations. However, the USACE was unable to commit to any specific dredging, containment, and disposal methods at this time because they need some flexibility to allow the contractors to bid on this project. Unfortunately, the bidding process cannot take place until the USACE receives authorization form the Department. Therefore, in order to proceed with an approval of some aspects of the project while deferring the decision about the final water quality certification, the USACE requested that the application be changed from an Individual (construction) ERP to a Conceptual ERP on 10/08/01. Though the applicant has not provided all of the timely requested information for issuance of a consolidated environmental resource permit allowing project construction, the Department is authorized to issue a 20-year conceptual environmental resource permits pursuant to section 62-343.060, F.A.C. The issuance of a Conceptual ERP will allow the USACE to put the project out for bid and select a contractor. With the details from the selected contractor's proposal, the USACE will apply for an Individual ERP, which will include the final water quality certification. Construction may only be initiated by the USACE following submittal of final design information, issuance of the DEP individual environmental resource permit(s), and receipt of the fully executed sovereign submerged lands authorization.

Although, in most cases, the two processes of regulatory and proprietary reviews and authorizations are now "linked" by rule and statute, the applicant has requested regulatory approval of the proposed activity via issuance of a conceptual environmental resource permit. Pursuant to rules 18-21.00401 and 62-343.075, F.A.C., the Department's decision to issue a conceptual permit and act on behalf of the BOT on the proprietary authorization, are not required to be linked. Conceptual permits are not subject to concurrent approval in a "Consolidated Notice of Intent to Issue" and, therefore, the authorizations must be contained in two separate documents.

Though the dredging method is not restricted by the Conceptual Permit, it should be noted that methods that cause a greater degree of particulate suspension and contaminant dissolution may not be able to meet water quality standards, even with procedural modifications and the use of turbidity barriers. A water quality variance for turbidity has been requested by the USACE, and it is expected that a variance will be necessary in order to issue an individual ERP. In addition, staff considers it likely that variances for other parameters will be necessary. A mixing model would

be useful in determining which dredging methods are not likely to meet water quality standards, but the USACE has indicated that this process would be too lengthy and costly. Water quality mitigation will be necessary in order to address water quality degradation that occurs during this dredging project.

Pursuant to Section 373.414(1)(b)2., F.S., "*if the applicant is unable to meet water quality standards because existing ambient water quality does not meet standards, the governing board or the department shall consider mitigation measures proposed by or acceptable to the applicant that cause net improvement of the water quality in the receiving body of water for those parameters which do not meet standards.*"

Activities that could be considered as water quality mitigation include obtaining Clean Marina or Facility status, stormwater projects, or pollution prevention projects. The local sponsor will be responsible for providing this mitigation.

Scheduling dredging activities in coordination with ongoing river traffic will be a significant challenge. Currently, river traffic is restricted by drawbridges, cruise ship use of Biscayne Bay access channels, tide stage, and river depth. It is estimated that the project will take approximately 18 months to complete. During actual dredging activities, it is probable that river traffic will not be allowed on the river, creating an additional scheduling issue. This restriction may be necessary because the size of the channel creates a safety concern when there is more than one ship in the channel. In addition, it is likely that ship traffic would increase turbidity or disrupt turbidity barriers deployed during dredging activities.

Seasonal heavy rains, and tides will also be complicating factors with regard to water quality. Though the USACE has indicated that the project cannot be scheduled to avoid working during hurricane season or ebb tides, it is likely that under certain flow conditions, dredging and/or disposal discharge operations would not be able to meet state water quality standards. A mixing model would be useful in determining under what flow conditions water quality standards would not be met, but as indicated previously, the USACE has indicated that this would be too lengthy and costly. Given the absence of significant benthic resources within the river, staff currently is of the opinion that a variance will be required, extending the mixing zone boundary no further than the mouth of the river. Beyond the mixing zone boundary, water quality standards must be met. A mixing model would also be useful in obtaining reasonable assurance that unacceptable contaminant levels will not extend past the mixing zone boundary.

In absence of a mixing model provided prior to permit issuance, an extensive water quality and flow monitoring program will be required prior to and during dredging activities. Dredging activities will begin at the upriver extent of the project, which will allow adequate time to collect water quality and flow data adequate to run a mixing model prior to dredging in areas near the mixing zone boundary.

The USACE has investigated multiple disposal alternatives, and their preferred methods entailed pumping material to one of two possible disposal sites, Palmer Lake or Virginia Key. Use of both of these potential sites created environmental concerns, and there were land acquisition problems at the Palmer Lake site. Due to significant objection from local interests, the USACE has not pursued these options.

The currently proposed disposal method entails the use of an interim disposal site located adjacent to the Miami Jai-Alai Arena, between NW 37th Ave and NW 36th Ave near NW 33rd St. The site is slightly less than 10 acres and is 1 block away from the Miami River. The site is covered with asphalt, so groundwater leaching may be reduced, but at least some of the outer areas will need to have the asphalt removed, in order to construct structurally sound berms. Groundwater at the interim disposal site is within a few feet of ground surface, and due to the marine influence and long-term industrial nature of the area, is not appropriate for potable use. With the site located so close to the major drainage feature of the basin, and with asphalt covering most of the site, it is unlikely that groundwater will be significantly affected. The interim disposal site is also located adjacent to a railroad spur, which would allow for removal of dried spoil by railcar to the final disposal site. In addition, the owner of the lot between the interim disposal site and the river has indicated that he would allow his property to be used for project-related activities, such as off-loading, slurrying, and pumping.

Polymers or flocculants may be useful to increase the efficiency of sediment dewatering. The selection of a polymer or flocculant would require the submission of information showing that the compound would be effective and would not have acute or chronic toxic effects, or cause water quality degradation.

Dewatered sediments may have contaminant levels that restrict the final method of disposal. Florida Solid Waste rule 403.7045 requires that dredge material or fill material be disposed pursuant to a dredge and fill permit. The Individual ERP will have conditions adequate to protect groundwater and surface water discharges, pursuant to state law, at the final disposal site.

The USACE will require that the selected contractor operate within all state environmental regulations. As an additional assurance, and as an operations monitoring procedure, testing programs for sediments, surface water, groundwater, and biological resources will be required in the Individual Permit. The testing program will focus on detecting the potential for violations of state standards, and stopping or modifying operations prior to an actual violation.

Preliminary surveys of the project area indicate the presence of a large amount of debris, such as bicycles, refrigerators, scrap metal, etc. This material shall be collected and disposed of properly. The requirements for disposal will be dependent on the nature of the debris.

The project entails only maintenance of previously dredged areas. The project area contains no significant benthic natural resources, such as seagrasses, hardbottom, shellfish, etc. It is not anticipated that mitigation for direct impacts to natural resources will be required. It should be noted that if the monitoring program identifies impacts to natural resources outside of the dredging area, for example in Biscayne Bay, then mitigation may be required.

Manatees frequent the Miami River during all times of year, but are particularly abundant in the winter. The river is designated critical habitat for manatees. FWC has indicated that the project would be permittable if a sufficiently intensive watch program is employed. All estuarine and marine waters of Dade County are designated as Essential Fish Habitat by the National Marine Fisheries Service. Though the Miami River does not provide structural habitat, the designation is appropiate due to the large amount of detritus-rich waters that drain through the river, from the Everglades. The dredging project will not effect the function of the river as a conduit for detritus-rich waters, and it is possible that with the sediments removed, the river could provide improved habitat.

B. Specific Regulatory Basis for Issuance

Through the above and based on the general/limiting and specific conditions to the permit, the applicant has provided affirmative reasonable assurance that in concept, the construction and operation of the activity, considering the direct, secondary and cumulative impacts, will comply with the provisions of Part IV of Chapter 373, F.S., and the rules adopted thereunder, including the Conditions for Issuance or Additional Conditions for Issuance of an environmental resource permit, pursuant to Part IV of Chapter 373, F.S., Chapter 62-330, and Sections 40E-4.301 and 40E-4.302, F.A.C. In concept, the construction and operation of the activity will not result in violations of the water quality standards set forth in Chapters 62-3, 62-4, 62-302, 62-520, 62-522, and 62-550, F.A.C. and will not degrade ambient water quality in Outstanding Florida Waters pursuant to Rule 62-4.242, F.A.C. The applicant has also demonstrated that the construction of the activity, including a consideration of the direct, secondary, and cumulative impacts, is not contrary to the public interest, pursuant to paragraph 373.414(1)(a), F.S.

IV. PUBLICATION OF NOTICE

The Department has determined that the proposed activity, because of its size, potential effect on the environment or the public, controversial nature, or location, is likely to have a heightened public concern or likelihood of request for administrative proceedings. Therefore,

pursuant to Section 373.413(4), F.S., and paragraph 62-343.090(2)(k), F.A.C., you (the applicant) are required to publish at your own expense the enclosed notice of this Consolidated Notice of Intent to Issue. The notice is required to be published one time within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to:

Department of Environmental Protection
Office of Beaches and Coastal Systems
3900 Commonwealth Boulevard, Mail Station 300
Tallahassee, Florida 32399-3000

The proof of publication shall be provided to the above address within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time shall be grounds for denial of the permit.

V. RIGHTS OF AFFECTED PARTIES

The Department will issue the permit (draft attached) unless a sufficient petition for an administrative hearing is timely filed pursuant to sections 120.569 and 120.57, Florida Statutes, as provided below. The procedures for petitioning for a hearing are set forth below.

Mediation under Section 120.573, F.S., is not available for this proceeding.

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Because the administrative hearing process is designed to redetermine final agency action on the application, the filing of a petition for an administrative hearing may result in a modification of the permit or even a denial of the application.

Under rule 62-110.106(4), Florida Administrative Code, a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension

of time shall toll the running of the time period for filing a petition until the request is acted upon. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

In the event that a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention will be only at the discretion of the presiding judge upon the filing of a motion in compliance with rule 28-106.205, F.A.C.

In accordance with rules 28-106.111(2) and 62-110.106(3)(a)(1), F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first.

Under section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301, F.A.C. Under sections 120.569(2)(c) and (d), F.S., a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

This intent to issue constitutes an order of the Department. The applicant has the right to seek judicial review of the order under section 120.68, F.S., by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department. The applicant, or any party within the meaning of section 373.114(1)(a), F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under section 373.114(1), F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the final order is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Martin K. Seeling
Environmental Administrator
Office of Beaches and Coastal Systems

Copies furnished to:

Tim Rach, DEP, SE District
Patrick Krechowski, DEP, Office of General Counsel
David Mayer, DEP, CAMA
Inger Hansen, DEP, SE District
Mary Murphy, DEP, SE District
Geetha Selvendran, DEP, SE District
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David Hartman, FWCC, BPSM
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Mike Johnson, NMFS
Susan Markley, Dade Co. DERM
David Miller, Miami River Commission
Ken Jones, PBSJ
Stacey Roberts, PBSJ
OBCS Permit Information Center
OBCS File

FILING AND ACKNOWLEDGMENT

FILED, on this date with the designated Department Clerk, pursuant to Section 120.52, Florida Statutes, receipt of which is hereby acknowledged.

Della Weaver 12/5/01

Deputy Clerk Date

DRAFT
CONCEPTUAL ENVIRONMENTAL RESOURCE PERMIT

PERMITTEE/AUTHORIZED ENTITY:
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019

Permit/Authorization No.: 0180701-001-EC
Date of Issue: XXXXXX

Expiration Date : XXXXXX as per 62-343.110 F.A.C.

County: Dade
Project: Miami River Federal Channel Maintenance Dredging

This conceptual permit is issued under the authority of Part IV of Chapter 373, F.S., Title 62, Florida Administrative Code (F.A.C.), and Section 62-343.060 F.A.C. Pursuant to Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity.

This permit also consistitutes a preliminary finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

This permit also constitutes preliminary certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.

The Department has hereby conceptually approved the work shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof. **Construction is not authorized at this time, pending submittal of the requested information and issuance of subsequent Environmental Resource Permits for the proposed mitigation activities and construction of the proposed port facilities.** Any work that exceeds the scope of activities covered herein, or any significant deviations from the proposed designs are not conceptually authorized by this permit. Such work would require an additional Environmental Resource Permit and sovereign submerged lands authorization.

ACTIVITY DESCRIPTION:

The project is to maintenance dredge 877,500 cubic yards of material from the 5.5 mile length of the federal channel in the Miami River. The dredge material will be dewatered at an interim disposal site located near the upstream end of the project. The final dredged material disposal method will be determined based on chemical analysis of the dewatered material and its leachate, and will be consistent with regulations for the protection of surface and groundwater at the disposal site. If water quality standards cannot be maintained within 150 meters of the

dredging or discharge points, a variance would be required to extend the standard mixing zone for the identified water quality parameters. This mixing zone shall not extend seaward of the mouth of the river. Existing water quality in the Miami River is currently degraded. All reasonable efforts to minimize additional water quality impacts shall be taken, and only temporary impacts will be considered allowable. Mitigation for any further impacts to current water quality in the project area will be required, even if the impacts are temporary in nature.

ACTIVITY LOCATION:
The activity is located in the Miami River, within the City of Miami, Dade County, Sections 27, 28, 33, 34, 35 Township 53 South, Range 41 East and Section 38 Township 54 South, Range 41 East, Class III Waters, within the Biscayne Bay Aquatic Preserve, Outstanding Florida Waters.

GENERAL CONDITIONS: (to be included in subsequent Environmental Resource Permits for construction of the proposed facilities):

1. All activities approved shall be implemented as set forth in the drawings incorporated by reference and in compliance with the conditions and requirements of this document. The Corps shall notify the Department in writing of any anticipated significant deviation from this authorization prior to implementation so that the Department can determine whether a modification is required. If the Department determines that a deviation is significant, then the Corps or the local sponsor, as appropriate, shall apply for and obtain the modification prior to its implementation.

2. If, for any reason, the Corps does not comply with any condition or limitation specified herein, the Corps shall immediately provide the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. Compliance with the provisions of this condition shall not preclude the Department from taking any enforcement action allowed under state law to the extent that federal sovereign immunity has been waived under 33 U.S.C. 1323 and 1344(t).

3. The Corps shall obtain any applicable licenses or permits which may be required by federal, state, local or special district laws and regulations. Nothing herein constitutes a waiver or approval of other Department permits or authorizations that may be required for other aspects of the total project. Projects shall not proceed until any other required permits or authorizations have been issued by the responsible agency.

4. Nothing herein conveys title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of sovereign land of Florida seaward of the mean high-water line, or, if established, the erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.

5. Any delineation of the extent of a wetland or other surface water submitted as part of the application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this authorization or a formal determination under Section 373.421(2), F.S., provides otherwise.

6. Nothing herein conveys to the Corps or creates in the Corps any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the Corps or local sponsor, or convey any vested rights or any exclusive privileges.

7. This document or a copy thereof, complete with all conditions, attachments, modifications, and time extensions shall be kept at the work site on the authorized activity. The Corps shall require the contractor to review this document prior to commencement of the authorized activity.

8. The Corps specifically agrees to allow Department personnel with proper identification, at reasonable times and in compliance with Corps specified safety standards access to the premises where the authorized activity is located or conducted for the purpose of ascertaining compliance with the terms of this document and with the rules of the Department and to have access to and copy any records that must be kept; to inspect the facility, equipment, practices, or operations regulated or required; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance. Reasonable time may depend on the nature of the concern being investigated.

9. At least forty-eight (48) hours prior to the commencement of authorized activity, the Corps shall submit to the Department a written notice of commencement of activities indicating the anticipated start date and the anticipated completion date.

10. If historic or archaeological artifacts are discovered at any time on the project site, the Corps shall immediately notify the State Historic Preservation Officer, and if a significant deviation is necessary, shall also notify the Department.

11. Within a reasonable time after completion of project construction or a periodic maintenance dredging event, the Corps shall submit to the Department a written statement of

completion. This statement shall notify the Department that the work has been completed as authorized and shall include a description of the actual work completed. The Department shall be provided, if requested, a copy of any as-built drawings required of the contractor or survey performed by the Corps.

SPECIFIC CONDITIONS:

1. This permit constitutes approval only of the details reflected in the staff report, and the attached drawings. This permit is binding on the issuance of future construction permits only to the extent that adequate data has been submitted for review by the applicant during the review process.

2.. The Department's issuance of this conceptual approval permit provides the conceptual approval permit holder with assurance that the concepts upon which the engineering and environmental designs are based are capable of providing for systems which meet Department rule criteria within the level of detail provided in the submitted plans and designs. A conceptual permit does not assure that a specific application for a construction permit will be granted. Future approvals shall be authorized only to the extent they are consistent with that information and the conditions of this conceptual approval permit. Primary areas for consistency comparisons include but are not limited to allowable discharge, wetland and other surface water impacts and proposed mitigation.

3. Pursuant to 62-343.110, F.A.C. the duration of the conceptual permits is as follows: "twenty years from the date of issuance of the conceptual approval permit, provided that a standard general or individual permit to construct the initial phase of construction is obtained, and construction of the initial phase has commenced within two years of the issuance of the conceptual approval permit. However, if the activity approved by the conceptual approval permit is undergoing a development-of-regional-impact review pursuant to Section 380.06, F.S., and an administrative appeal of that review has been filed, the permittee may toll the two year time period for permitting and undertaking construction by notifying the Department, in writing, within two years of issuance of the conceptual permit, that the development-of-regional-impact review has been appealed. The applicant shall also notify the Department, in writing, of the final action resolving such administrative appeal. If proper notice is given as indicated above, the two year time period for permitting and undertaking construction shall be tolled from the date the administrative appeal of the development-of-regional-impact review is filed, to the date of final action resolving such administrative appeal"

4. This Conceptual Environmental Resource Permit (ERP) does not authorize any of the construction activities mentioned herein. Any such authorization shall require issuance of an Individual ERP. Subsequent Individual ERP's to conduct the work outlined in this Conceptual ERP shall include specific conditions to protect water quality and biological resources.

5. In the subsequent Individual ERP application(s), the permittee shall provide final construction details of the dredging project, conceptually approved herein. At a minimum, this information shall include the following:

construction drawings (8 ½ X 11 and full size)
construction schedule
details regarding construction materials and methods
plans to protect water quality (surface water and groundwater)
plans for final disposal of spoil including design, residence time, and capacity of diposal sites
plans for the protection of threatened and endangered species

6. Dredging operations shall be managed to minimize turbidity and dissolution of contaminants. Considerations shall include:

monitoring river flows and adjustment of operations accordingly

interaction with and scheduling of boat traffic on the river

scheduling work on incoming tide, especially as work progresses toward the river mouth

begin dredging at the upriver extent of the project and working toward the mouth

7. Dredging by hydraulic or sealed mechanical method is preferred, in order to minimize turbidity. The permittee is advised that open clamshell dredging may not be able to meet water quality standards, even with turbidity barriers and procedural modifications.

8. If a polymer or flocculant is used, adequate information will be necessary regarding the toxicity and water quality characteristics of the compound. This information shall include but not be limited to a Material Safety Data Sheet, toxicity to aquatic organisms, concentration in decant, and half-life. Information describing the method of introducing and mixing the polymer will also be needed.

9. If state water quality standards for turbidity and other water quality parameters cannot be met at the edge of the standard 150 meter mixing zone, issuance of the Individual ERP would

require issuance of an associated variance for an expanded mixing zone. The application for this variance shall list the water quality parameter(s), and demonstrate that there are no practicable means known to meet the water quality standards within a 150 meter mixing zone. Issuance of the variance also requires assurance that water quality standards can be met at the edge of the expanded mixing zone, pursuant to 62-302, 62-4.242 and 62-4.244, F.A.C. Also see the Water Quality Monitoring specific condition.

10. The Individual ERP shall include a mixing zone, pursuant to Sections 62-4.242 and 244 F.A.C., which shall not extend beyond the mouth of the river, just west of where the river splits at Claughton Island. This mixing zone shall apply for all work west of the mixing zone boundary.

11. Discharge from the disposal site, if proposed, shall be managed to reduce contaminant concentrations at the compliance point (edge of mixing zone), e.g. timed according to tide, discharge flow control, adjust discharge according to river flow.

12. Water Quality Monitoring
A water quality monitoring plan, reviewed and approved by the Department, shall be developed prior to the issuance of an Individual ERP for this project. The plan will be included in the Individual ERP. The water quality monitoring plan shall include, or address the following items, and any other items reasonably necessary to provide adequate protection of water quality.

For several months prior to initiating dredging, a pre-dredge monitoring program will be performed, to determine "background" conditions. The monitoring program will entail water quality sampling at the mouth of the river, an interim point, and at the disposal site. The monitoring report shall include the data and findings, shall be submitted to the Department prior to the initiation of dredging, and shall be adequate for establishing background conditions that will be used for comparison to data obtained during project monitoring. Flow data and other information shall also be collected, adequate to run a mixing model for the river.

At initial start up and prior to any discharge of decant water from the disposal area, water in the disposal area will be monitored for those constituents which have the potential to cause an exceedance of their respective surface water standard, pursuant to 62-302 F.A.C. (e.g. eight RCRA metals, hardness, turbidity, pesticides/PCB's by EPA Method 8081/8082, PAH, tributyltin, Dioxin, etc.) and toxicity bioassay.

Water quality monitoring of the compliance point (edge of mixing zone), an intermediate river site, and disposal site discharge will also be required during the dredging project, for the same parameters listed above, with special attention to those parameters that have shown preconstruction exceedances of surface water standards. The sampling program

may vary based on the location of the dredging operation along the river, for example near tributary branches, or as work progresses toward the mouth. Based on results from previous monitoring, the sampling program may be modified during the project, by submitting a justification for the Department's approval. The Department may modify the monitoring plan requirements where reasonably warranted, for example in the case of a change in dredging and/or disposal operations by the selected contractor, or where review of monitoring data indicates inconsistencies or deficiencies in the plan.

If monitoring indicates exceedances of water quality standards occur or are imminent at the compliance point (edge of the mixing zone), the operation will be shut down immediately. In order to address such cases, a response plan shall be proposed to protect resources in Biscayne Bay. The dredging operation will remain shut down until modifications are made to reduce the level of contaminants entering the river. The operational modifications shall be approved by the Department prior to restart, and may include, but are not limited to the use of polymers/ flocculants, filters, increasing disposal site retention time, removal of spoil from the disposal area, etc. The Department's OBCS and SE District Office shall be notified verbally within 24 hours of any exceedance. A written description of the circumstances surrounding the exceedance shall be submitted with the modification plan.

Pursuant to 62-4.246 and 62-160 F.A.C., appropriate analytical methods shall be used, and shall provide a Method Detection Limit (MDL) below the appropriate standard or guidance level. If no method is available that can detect below the applicable standard or guidance level, then the method which provides the lowest MDL shall be used. Use of a method with a MDL above the standard or guidance level shall require prior approval from DEP OBCS.

All sampling, monitoring and analyses required in this permit shall be performed in accordance with Chapter 62-160, Florida Administrative Code (F.A.C.), Quality Assurance. Please be advised that significant changes are being promulgated for the Department's Quality Assurance procedures and rules pursuant to Chapter 62-160 F.A.C. All parties involved in sampling and analysis should keep appraised of these changes. Information about this rule may be obtained through the Departments web site at: http://www8.myflorida.com/environment/learn/science/laboratories/dqa/qaprog/workshop.html

13. Biological Resources Monitoring

A Biological Resources Monitoring Plan shall be developed by the permittee, which shall be reviewed and approved by the Department, prior to the issuance of an Individual ERP for this project. The plan will be included in the Individual ERP. The Biological Resources Monitoring

Plan shall include, or address the following items, and any other items reasonably necessary to provide adequate protection of biological resources.

The plan for the monitoring of the natural resources, such as benthic organisms and seagrass, waterward of the edge of the mixing zone shall be designed with the goal of detecting stress on the biological community that may not be detected by chemical/physical monitoring, e.g. chronic low level exposure to multiple contaminants, sporadic and transient acute contaminant exposure, physical effects of siltation, light attenuation, etc. This monitoring shall include observations relating to the health and function of the biological system.

14. Flow Monitoring

A Flow Monitoring Plan, shall be developed by the permittee and shall be reviewed and approved by the Department prior to the issuance of an Individual ERP for this project. The plan will be included in the Individual ERP. The Flow Monitoring Plan shall include, or address the following items, and any other items reasonably necessary to obtain the appropriate flow data.

The goal of the monitoring will be to acquire data necessary for the development of a mixing model. The mixing model will be used to assist in developing procedures and operations that minimize contaminant concentrations within the mixing zone.

15. Dewatered Spoil Monitoring

A Dewatered Spoil Monitoring Plan, shall be developed by the permittee, and shall be reviewed and approved by the Department, prior to the issuance of an Individual ERP for this project. The plan will be included in the Individual ERP. The Dewatered Spoil Monitoring Plan shall include, or address the following items, and any other items reasonably necessary to define the quality of the material.

The goal of the plan will be to determine the appropriate final disposition method for the dredge material. Analysis of the bulk material, and leachate prepared from the bulk material may be necessary in order to make this determination.

16. Groundwater Monitoring

A Groundwater Monitoring Plan, shall be developed by the permittee, and shall be reviewed and approved by the Department, prior to the issuance of an Individual ERP for this project. The plan will be included in the Individual ERP. The Groundwater Monitoring Plan shall include items reasonably necessary to provide adequate protection of groundwater quality.

Groundwater concerns mainly are associated with contaminants that may leach from the sediments at the interim and final disposal site(s).

17. Other permits may be required. This permit does not eliminate the necessity to obtain any required federal or state authorizations prior to the start of any activity conceptually approved by this permit. Please note the following items.

A Department Waste Management permit may be necessary, depending on the test results for the dewatered spoil material, and the intended final method of disposal.

The rules of the South Florida Water Management District require the permittee to obtain a water use permit from the South Florida Water Management District prior to construction dewatering, unless the work qualifies for a general permit pursuant to subsection 40E-20.302(4), F.A.C., also known as the "No Notice" rule.

18. Pursuant to 373.414(1)b, F.S., water quality mitigation will be necessary to offset any water quality impacts that can reasonably be expected to occur during the dredging operation. In addition, pursuant to 62-4.242, F.A.C., the project must be clearly in the public interest. Potential mitigation options include obtaining Clean Marina or Facility status, stormwater projects, or pollution prevention projects. The local sponsor will be responsible for providing this mitigation, which must be documented in a binding agreement between the local sponsor and the Department prior to issuance of the Individual ERP.

19. Corrections to the attached drawings include:

On the overall project aerial, "Sheet 1", the area marked "Mile -0.25 thru 4.19", should read "Mile -0.25 thru 2.93">

On the cross-section drawings, "Sheet 19", the project depth is shown as -15' MLW in all project areas. The cross-sections for areas with channel widths of 125' and 90', should show a depth of -12.5' MLW.

20. Protected Species Conditions

The standard manatee construction conditions shall be followed for all in-water construction.

Turbidity curtains or barriers will need to be monitored regularly to prevent manatee entanglement or entrapment. How frequently the barriers need to be monitored will be determined once turbidity containment is addressed by the applicant. This condition will then be modified to be more specific to the project proposal.

A manatee observer plan will be developed for the project and must be approved by the

Florida Fish and Wildlife Conservation Commission prior to issuance of the final permit. This plan must address the number of observers needed, where they will be located, and the observer's names and qualifications. The observer plan will require multiple observers that have experience in manatee observation, and are equipped with polarized sunglasses and binoculars to aid in observation. The manatee observers must be on site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Movement of a work barge, other associated vessels, and any in-water work shall be minimized to the extent possible after sunset, when the possibility of spotting manatees is negligible.

The permittee shall ensure that the contractor maintains a log detailing sightings, collisions, or injuries to manatees should they occur during the contract period. Manatee sighting information shall include the number of manatees seen per sighting, time of day observed, indicate if work was stopped due to manatee proximity, and when in-water work resumed once manatees left the area. Copies of the logs should be provided monthly to the Florida Fish and Wildlife Conservation Commission. Following project completion, a report summarizing incidents and sightings shall be submitted to the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, OES-BPS, Tallahassee, Florida 32399-1600.

To reduce the risk of crushing a manatee between a vessel and the wharf or between two vessels that are moored together, the permittee shall install wharf fenders with appropriate materials to provide sufficient standoff space of at least 4 feet under compression. Fenders or buoys providing a minimum standoff space of at least 4 feet under compression shall be used for all vessels associated with the dredging project, including dredges and barges. Fenders will also be required at the disposal site where the barge will off-load the dredged material.

Blasting shall be prohibited.

When construction details are available, more detailed conditions may be added for the final permit. If impacts to native habitat resources, such as submerged aquatic vegetation, are anticipated the FWC will reevaluate the project in light of the additional information concerning the loss of habitat.

21. For work outside of the area described in BOTIITF Deed # 18939, an application for the use of sovereign submerged lands shall be submitted by the local sponsor. All information necessary to process the proprietary authorization will be provided, prior to issuance of an Individual ERP.

Executed in _____, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____
Martin K. Seeling
Environmental Administrator
Office of Beaches and Coastal Systems

CERTIFICATE OF SERVICE

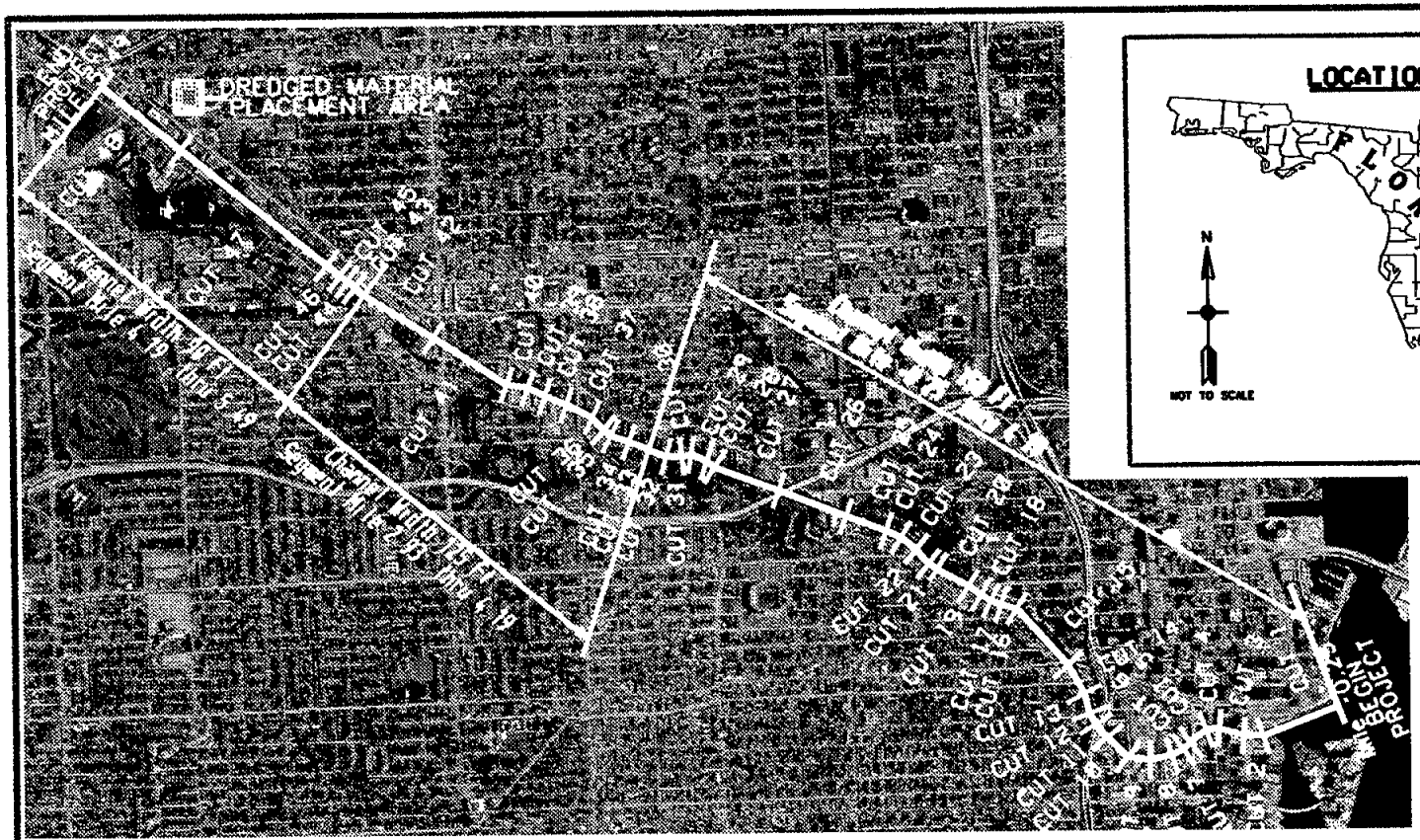
The undersigned duly designated deputy clerk hereby certifies that this permit and authorization to use sovereign submerged lands, including all copies, were mailed before the close of business on **XX**, 200**X**, to the above listed persons.

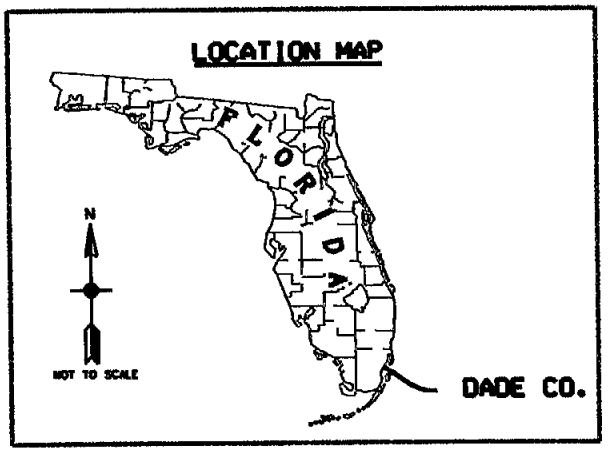
FILING AND ACKNOWLEDGMENT

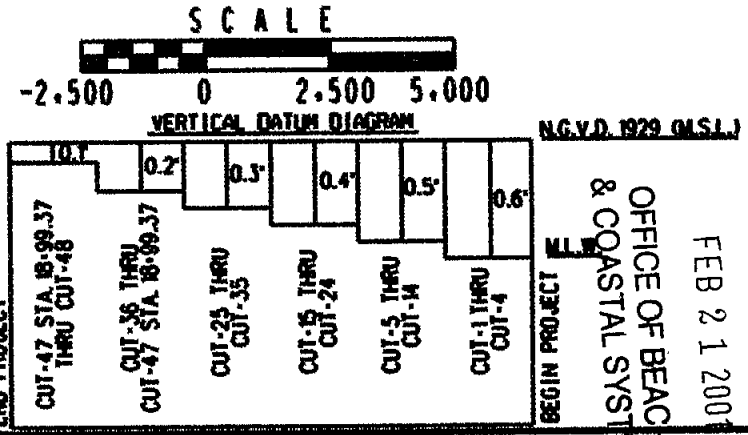
FILED, on this date, pursuant to 120.52(7),
Florida Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.

Clerk Date

Attachments:
Drawings 20 pages
62-4.242 F.A.C.
62-4-244 F.A.C.







U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
LOCATION MAP & PLAN VIEW

REV: FEB 01 | SHEET 1 OF

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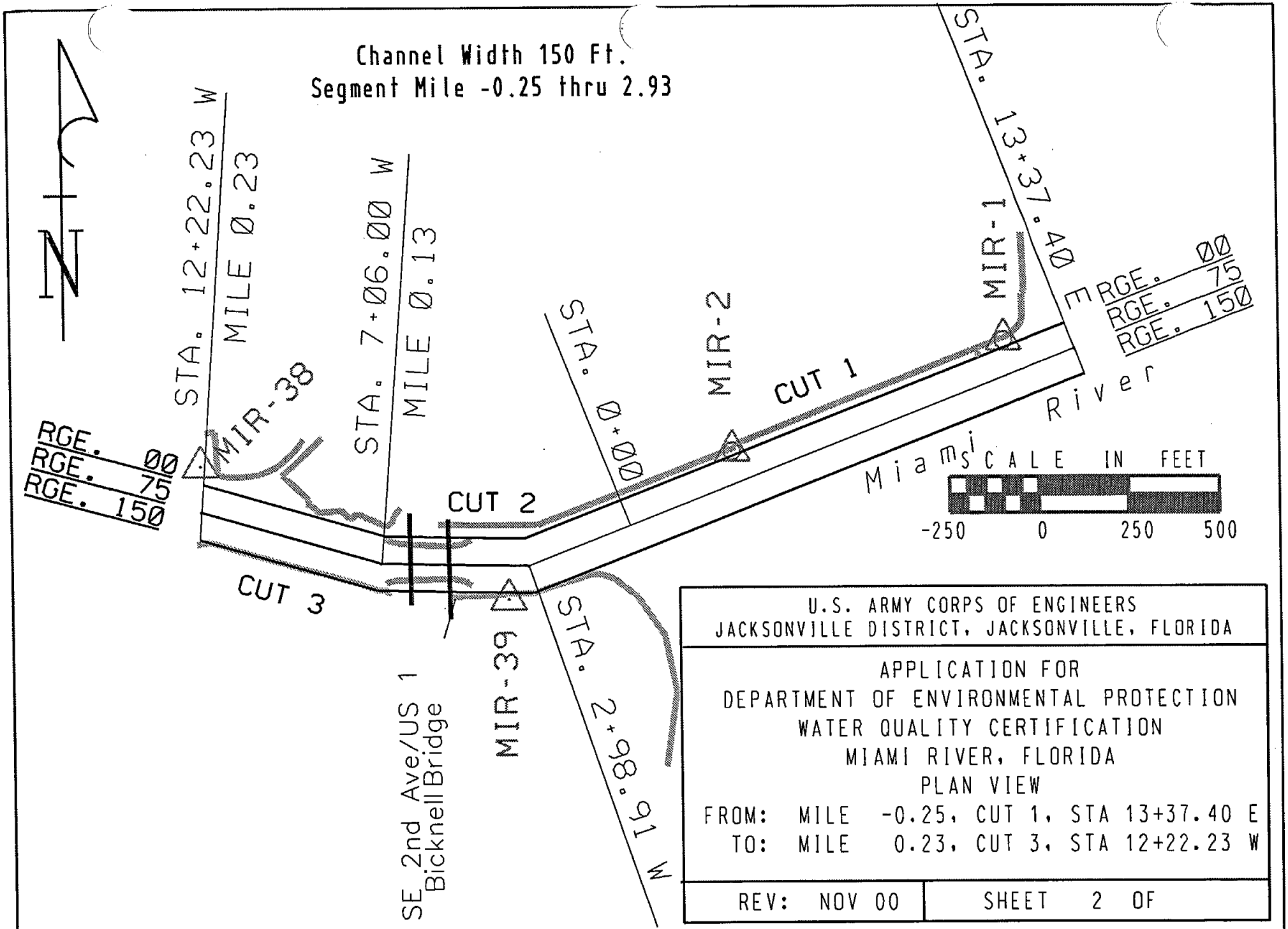
Note: See Specific Condition #19.

PERMIT NO. 180701001



U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

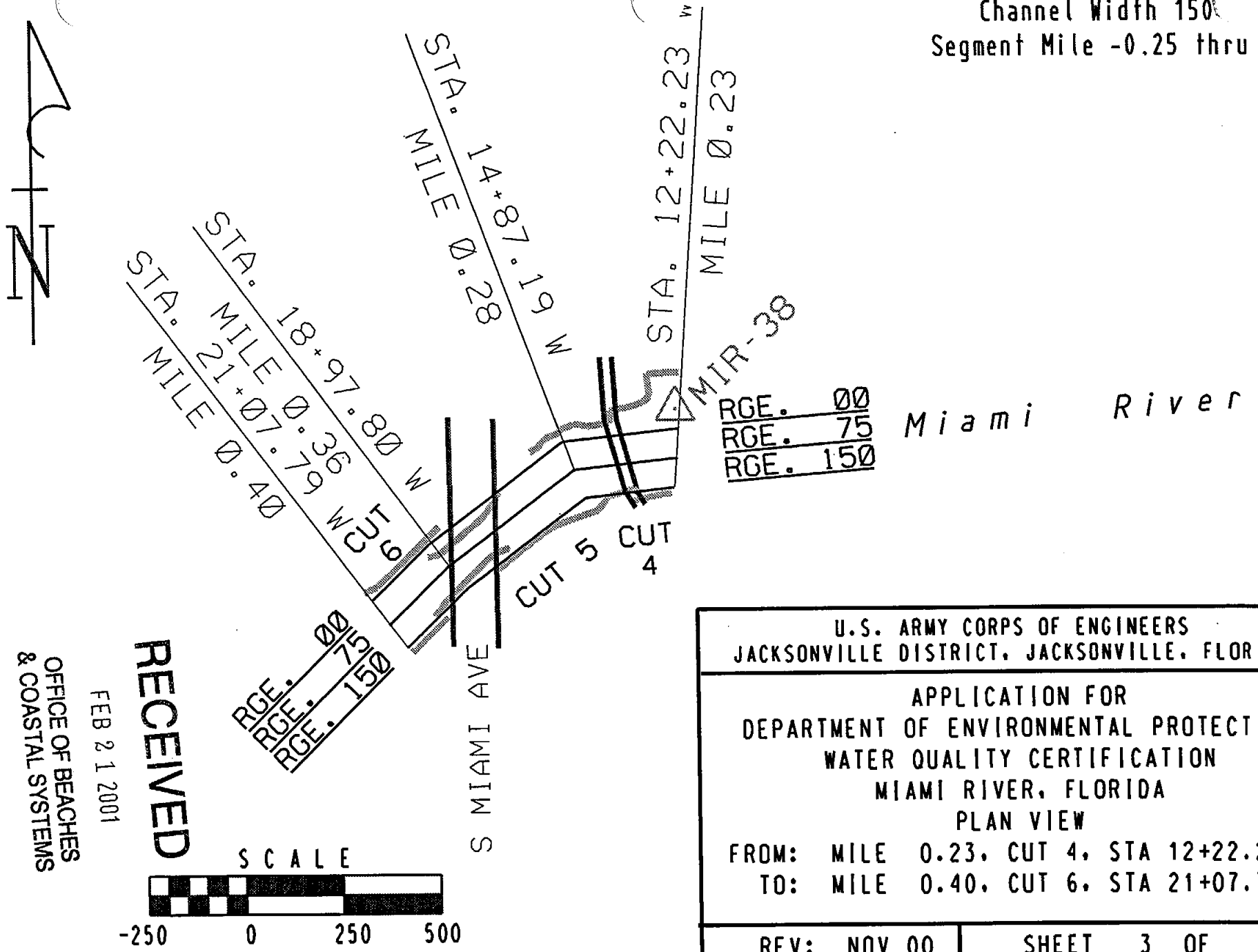
APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE -0.25, CUT 1, STA 13+37.40 E
TO: MILE 0.23, CUT 3, STA 12+22.23 W

REV: NOV 00 | SHEET 2 OF

PERMIT NO. 180701001

Channel Width 150 .
Segment Mile -0.25 thru 2.93



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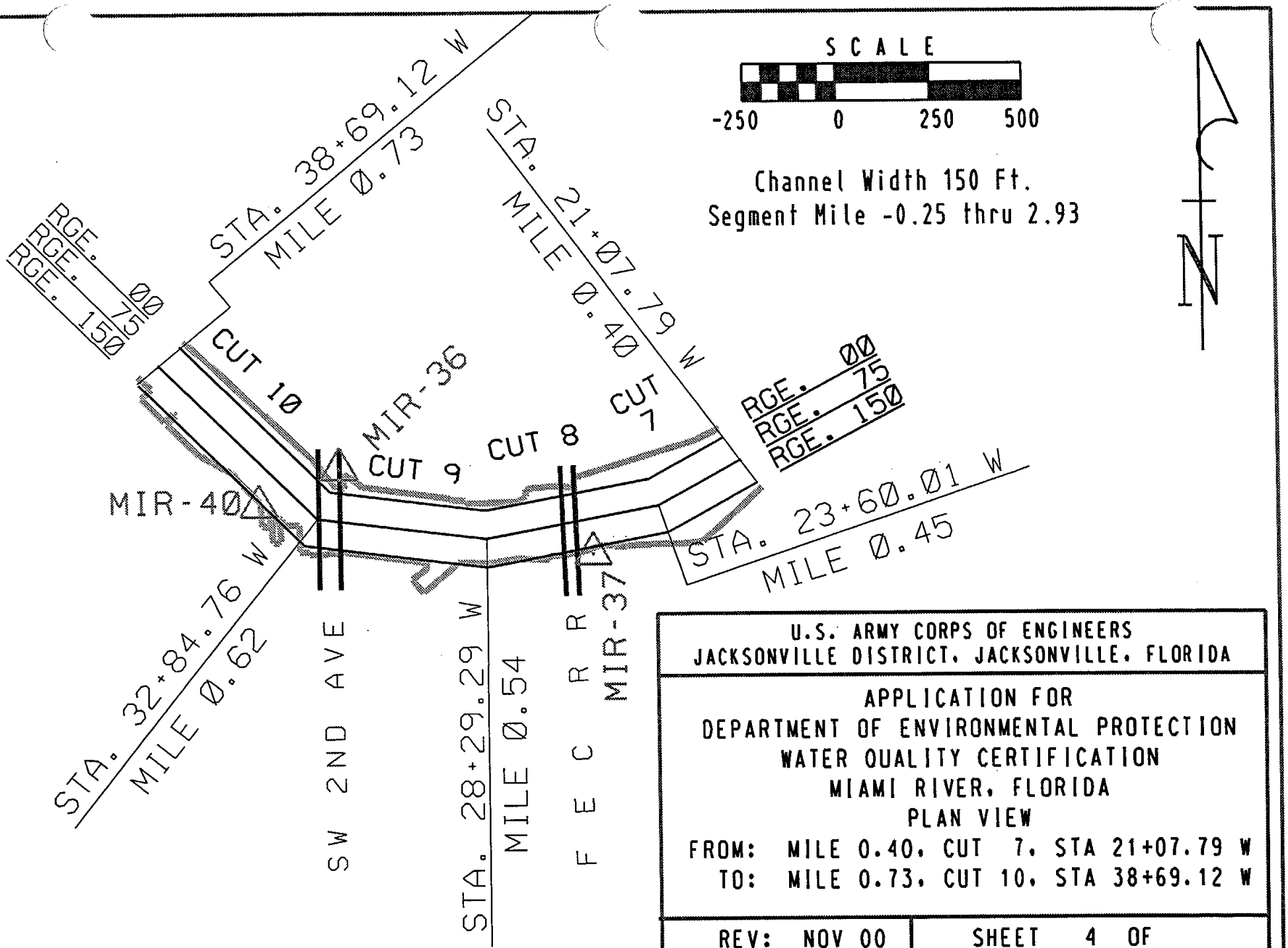
APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 0.23, CUT 4, STA 12+22.23 W
TO: MILE 0.40, CUT 6, STA 21+07.79 W

REV: NOV 00	SHEET 3 OF

PERMIT NO. 180701001



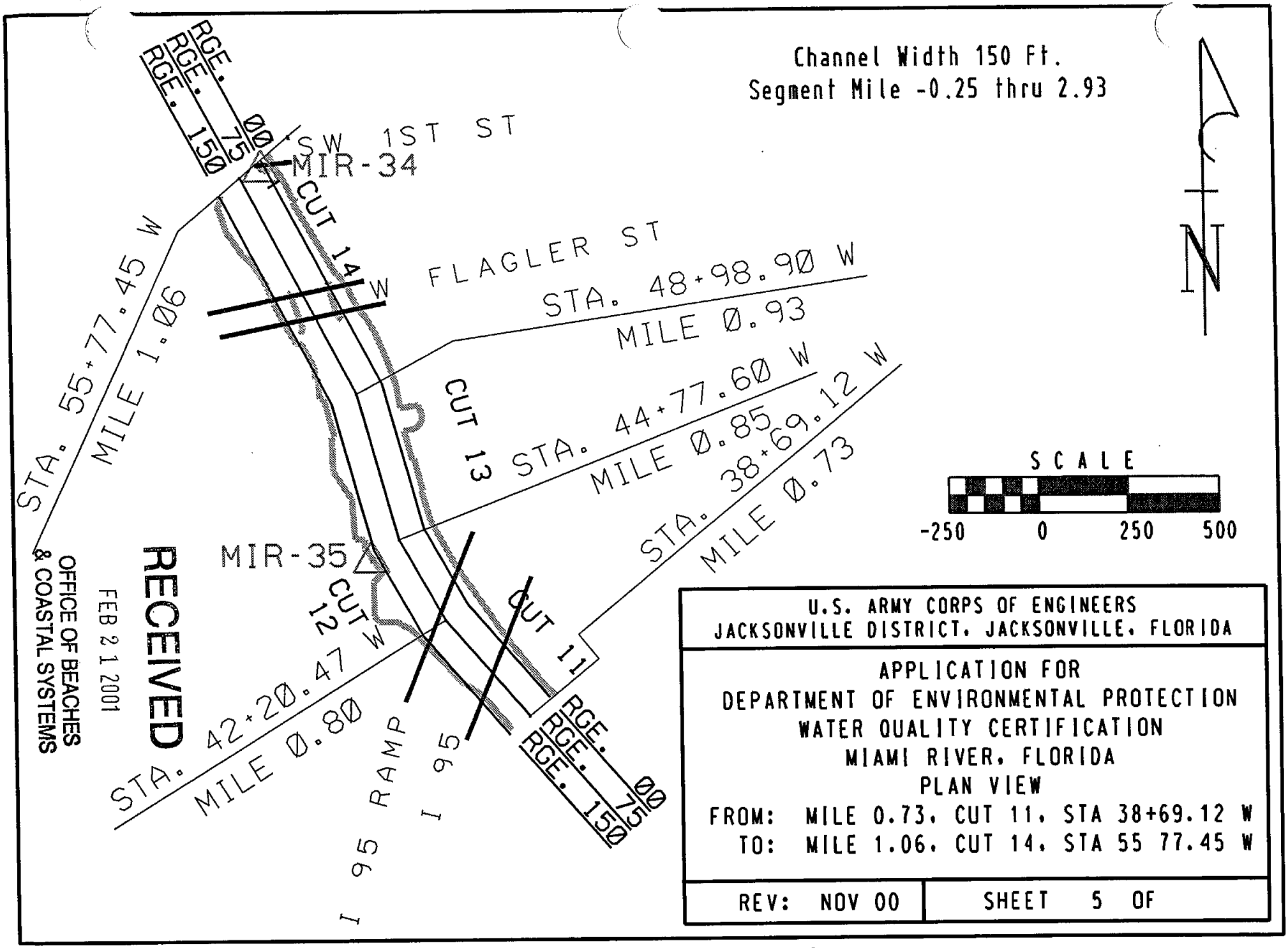
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

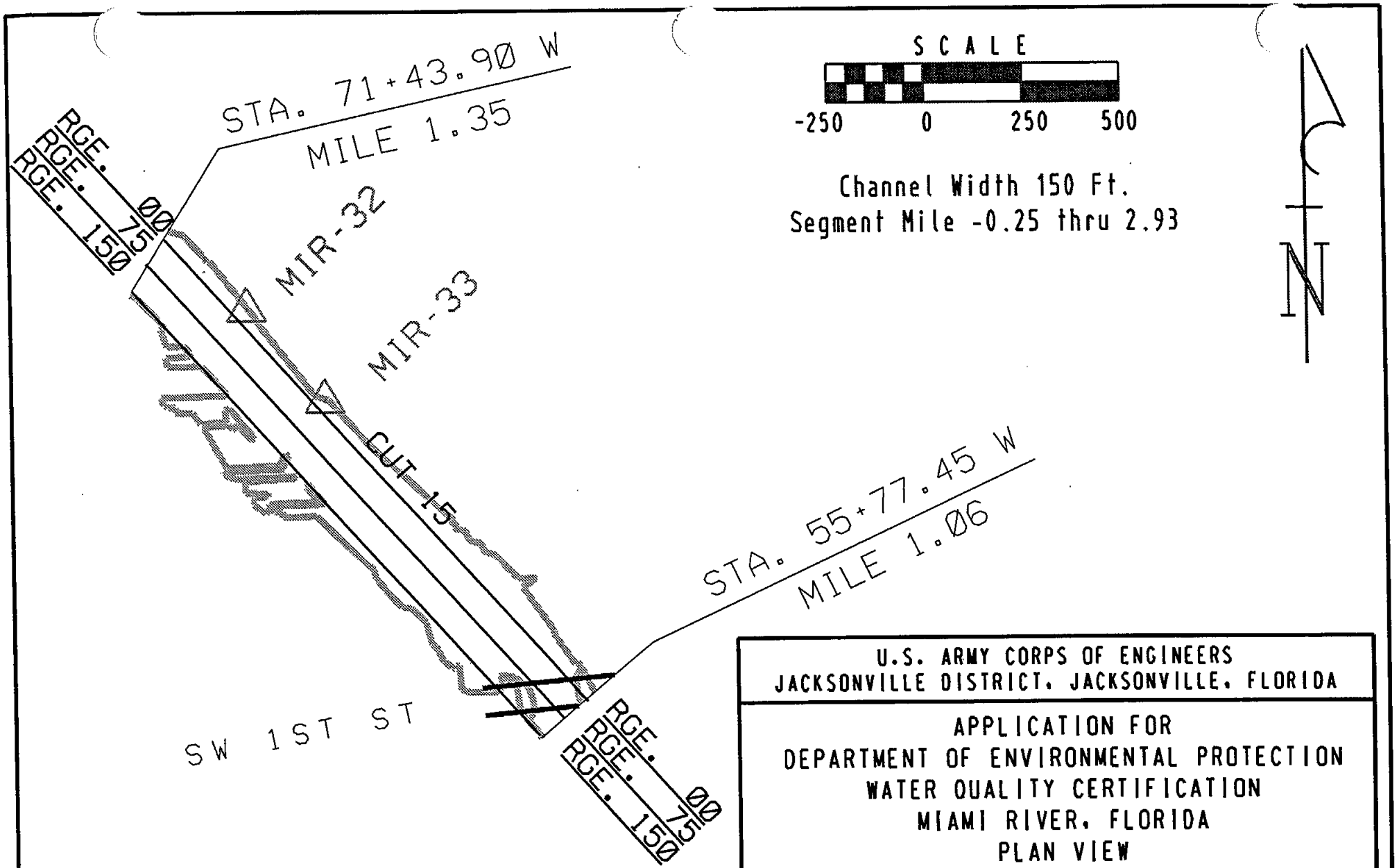
FROM: MILE 0.40, CUT 7, STA 21+07.79 W
TO: MILE 0.73, CUT 10, STA 38+69.12 W

REV: NOV 00 | SHEET 4 OF

PERMIT NO. 180701001



PERMIT NO. 180701001



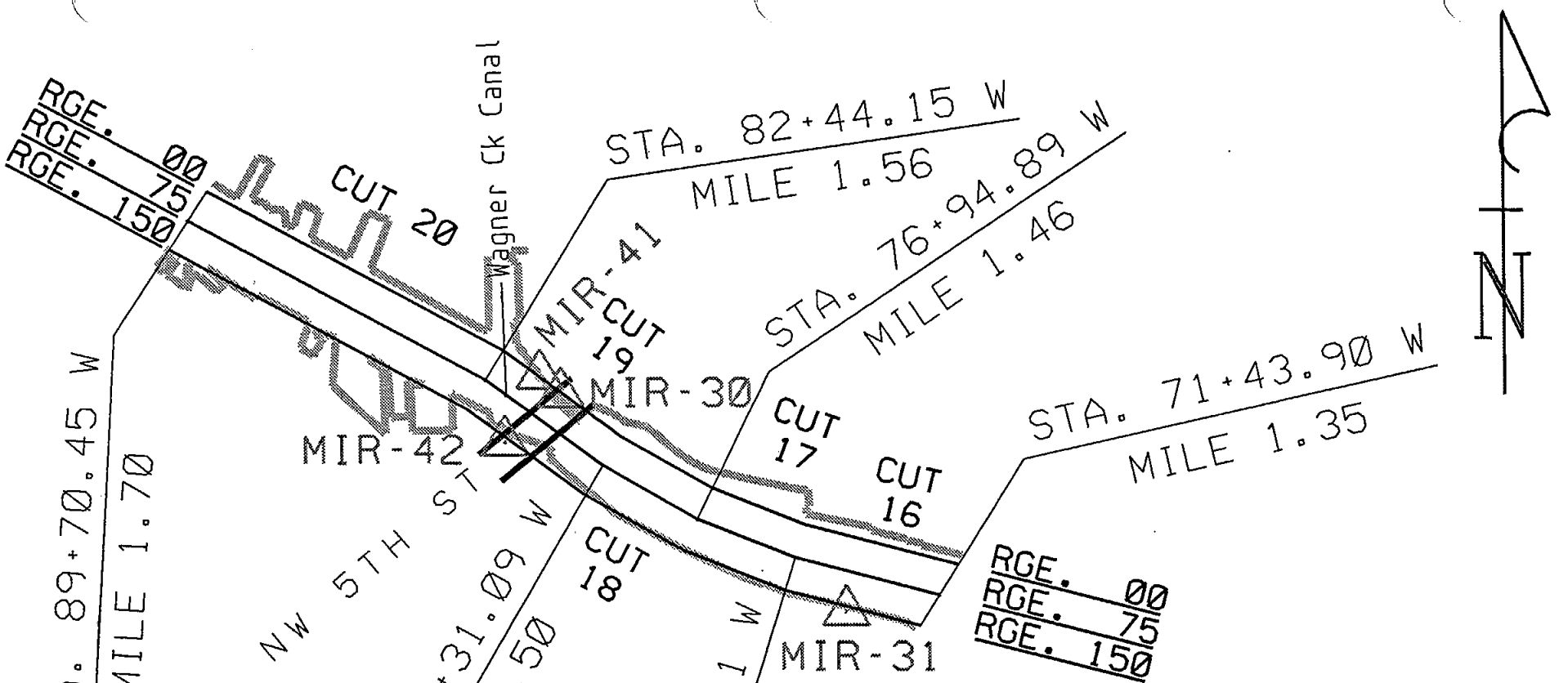
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 1.06, CUT 15, STA 55+77.45 W
TO: MILE 1.35, CUT 15, STA 71+43.90 W

REV: NOV 00 | SHEET 6 OF

PERMIT NO. 180701001



Channel Width 150 Ft.
Segment Mile -0.25 thru 2.93

SCALE

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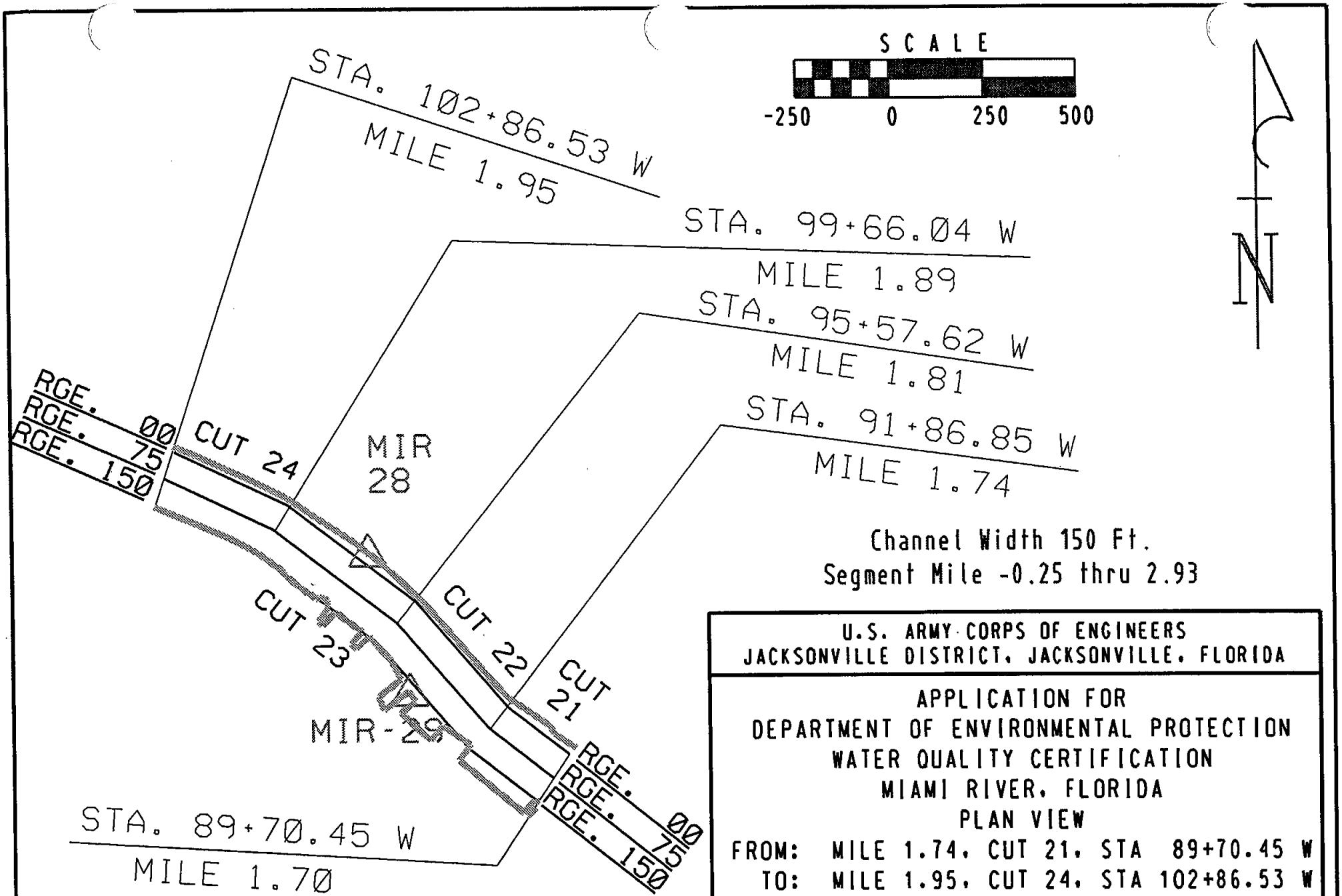
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 1.35, CUT 16, STA 71+43.90 W
TO: MILE 1.70, CUT 20, STA 89+70.45 W

REV: NOV 00 | SHEET 7 OF

PERMIT NO. 180701001



Channel Width 150 Ft.
Segment Mile -0.25 thru 2.93

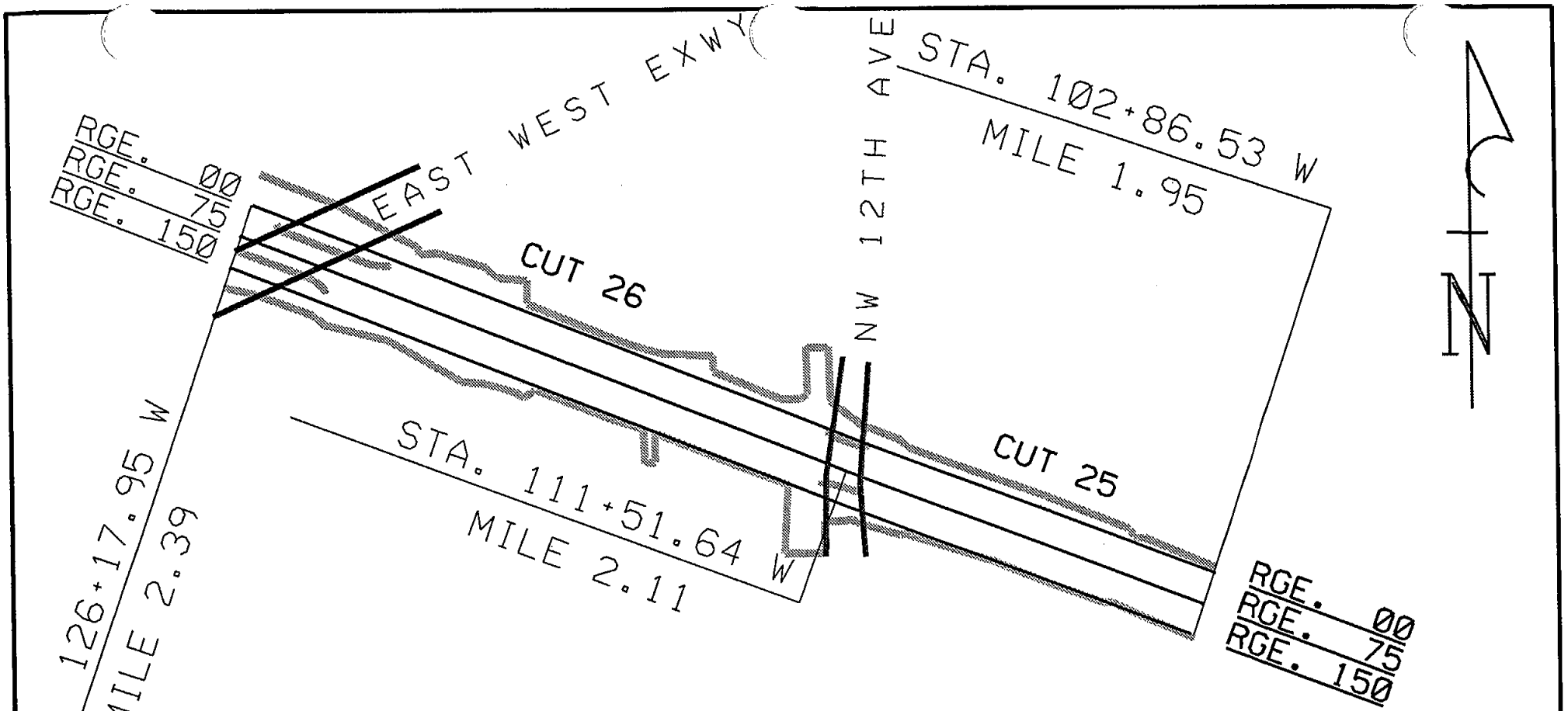
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 1.74, CUT 21, STA 89+70.45 W
TO: MILE 1.95, CUT 24, STA 102+86.53 W

REV: NOV 00	SHEET 8 OF

PERMIT NO. 1807 0100



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Segment Mile -0.25 thru 2.93

SCALE

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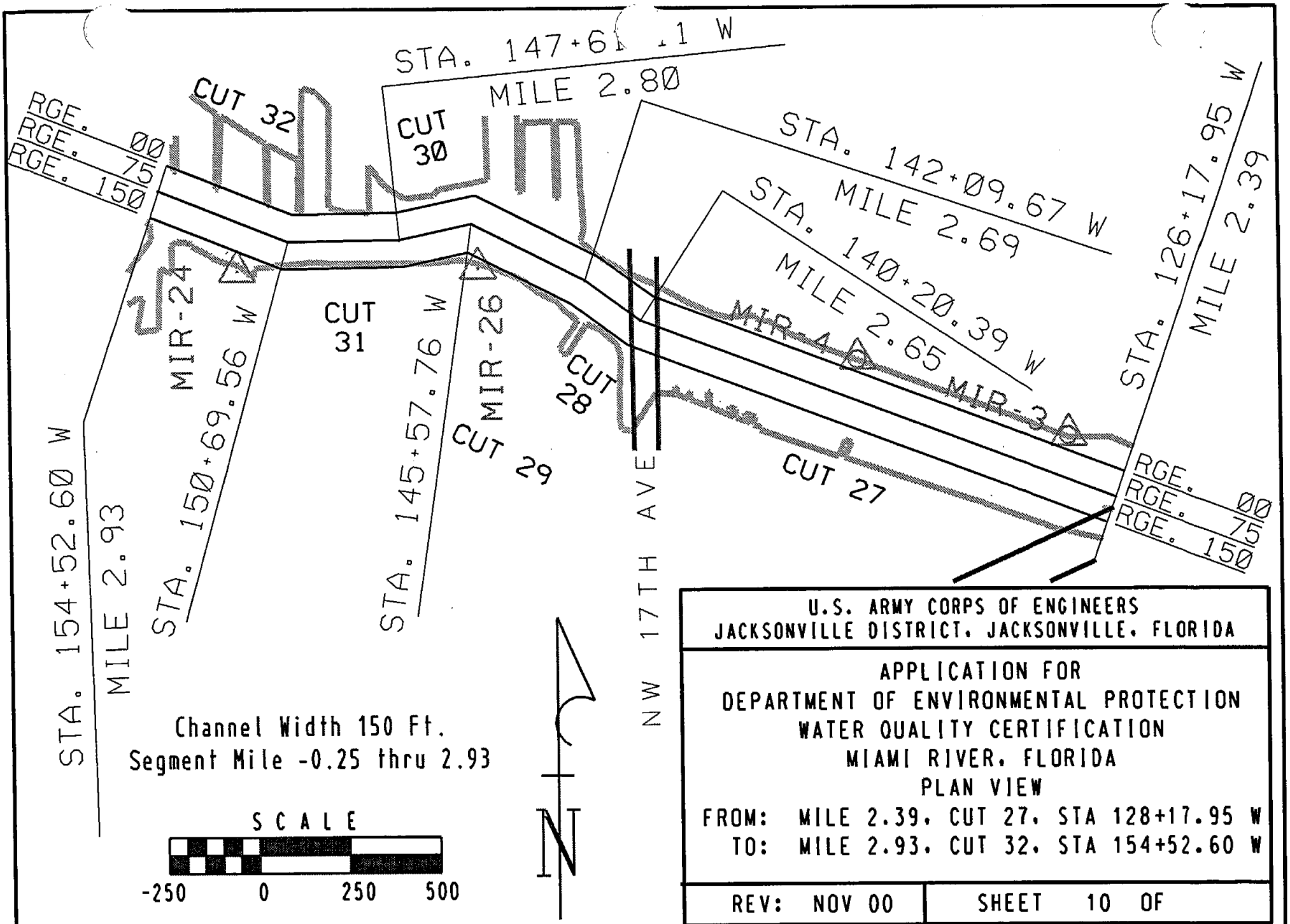
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 1.95, CUT 25, STA 102+86.53 W
TO: MILE 2.39, CUT 26, STA 126+17.95 W

REV: NOV 00	SHEET 9 OF

PERMIT NO. 180701001



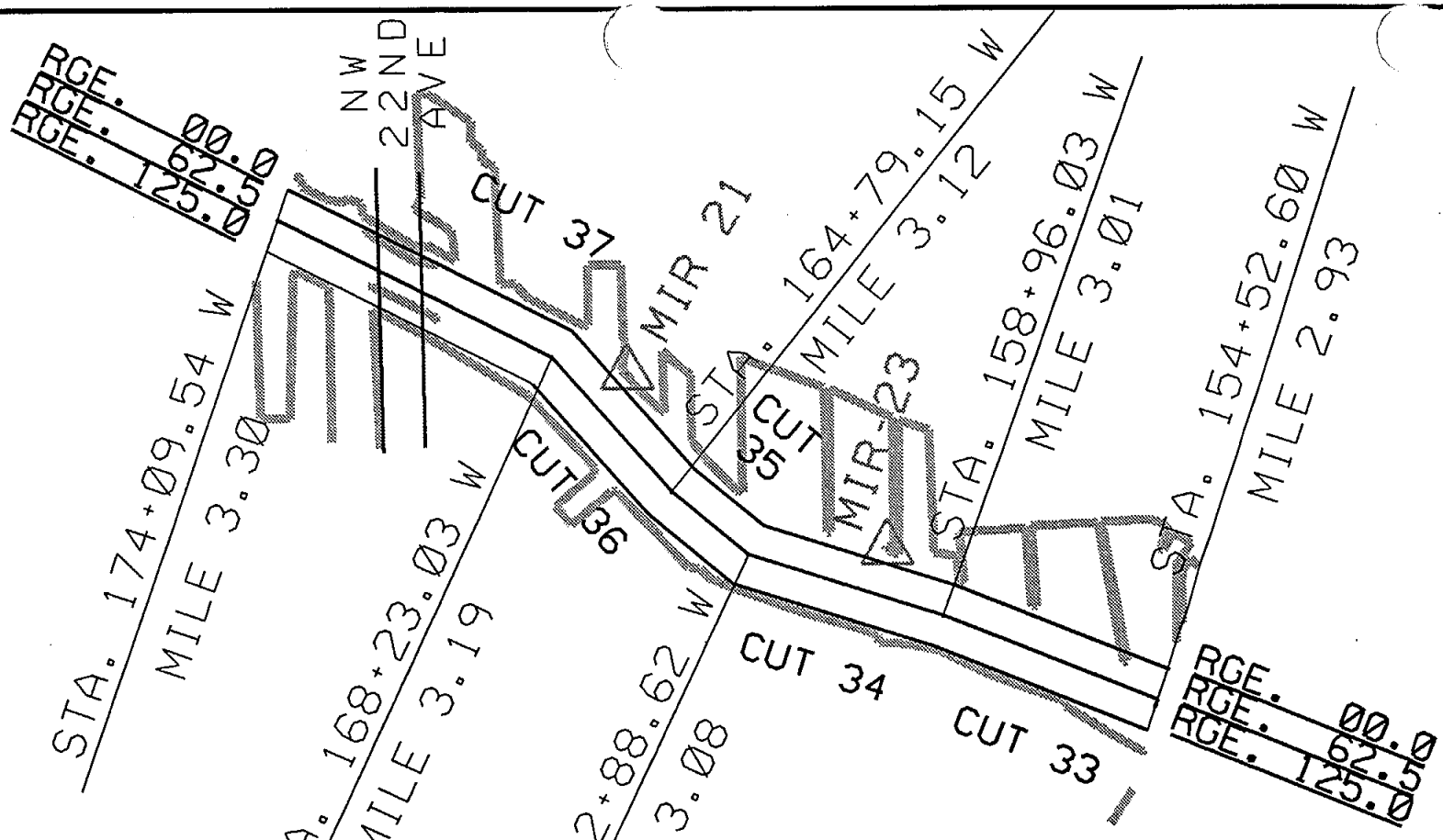
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 2.39, CUT 27, STA 128+17.95 W
TO: MILE 2.93, CUT 32, STA 154+52.60 W

REV: NOV 00	SHEET 10 OF

PERMIT NO. 180701001



Channel Width 125 Ft.
Segment Mile 2.93 thru 4.19

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SCALE

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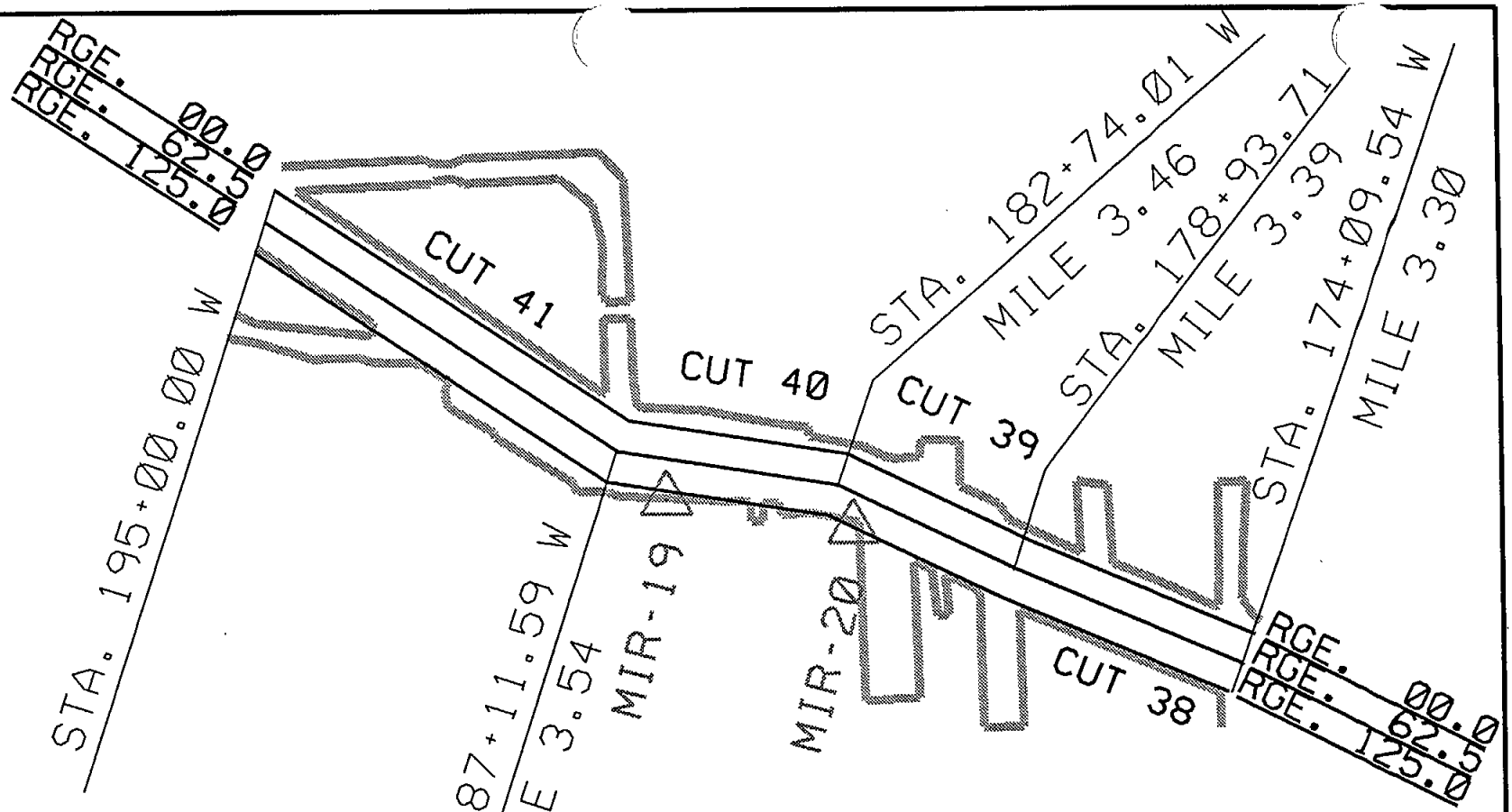
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW

FROM: MILE 2.93, CUT 33, STA 154+52.60 W
TO: MILE 3.30, CUT 37, STA 174+09.54 W

REV: NOV 00	SHEET 11 OF

PERMIT NO. 180701001



Channel Width 125 Ft.
Segment Mile 2.93 thru 4.19

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SCALE

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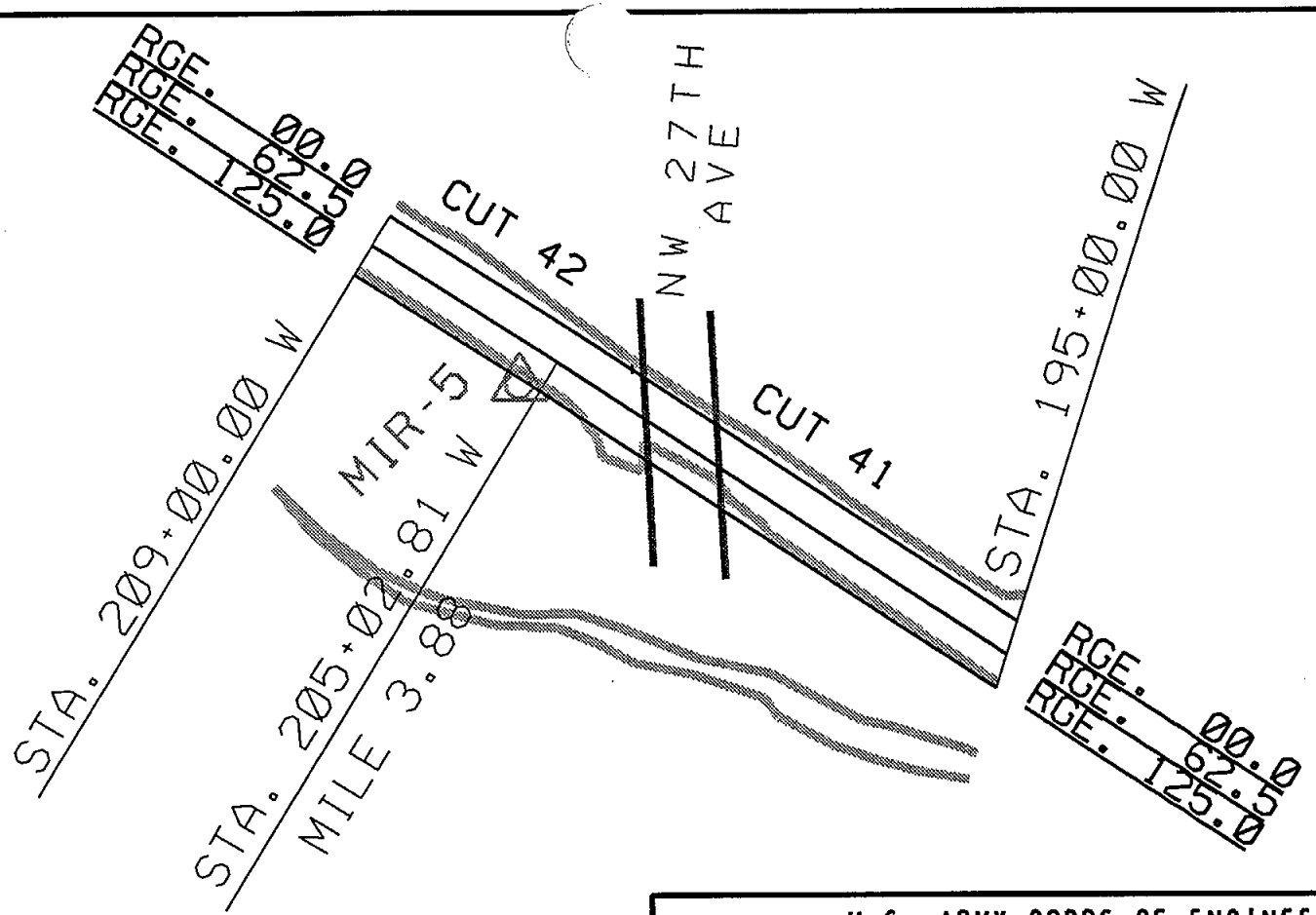
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: MILE 3.30, CUT 38, STA 174+09.54 W
TO: CUT 41, STA 195+00.00 W

REV: NOV 00	SHEET 12 OF

PERMIT NO. 180701001



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Segment Mile 2.93 thru 4.19

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SCALE

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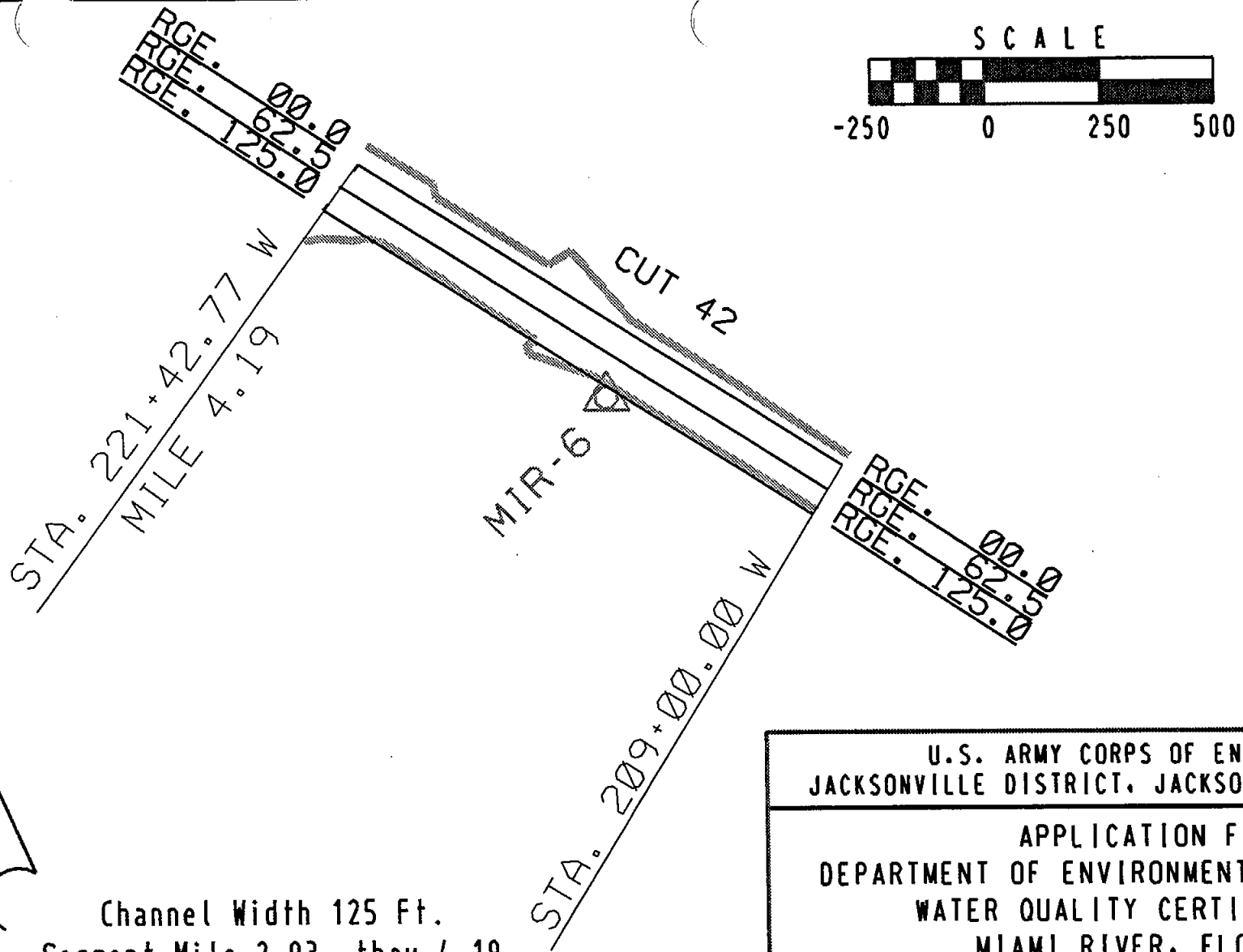
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: CUT 41, STA 195 W
TO: CUT 42 STA 209 W

REV: NOV 00	SHEET 13 OF

PERMIT NO. 180701001

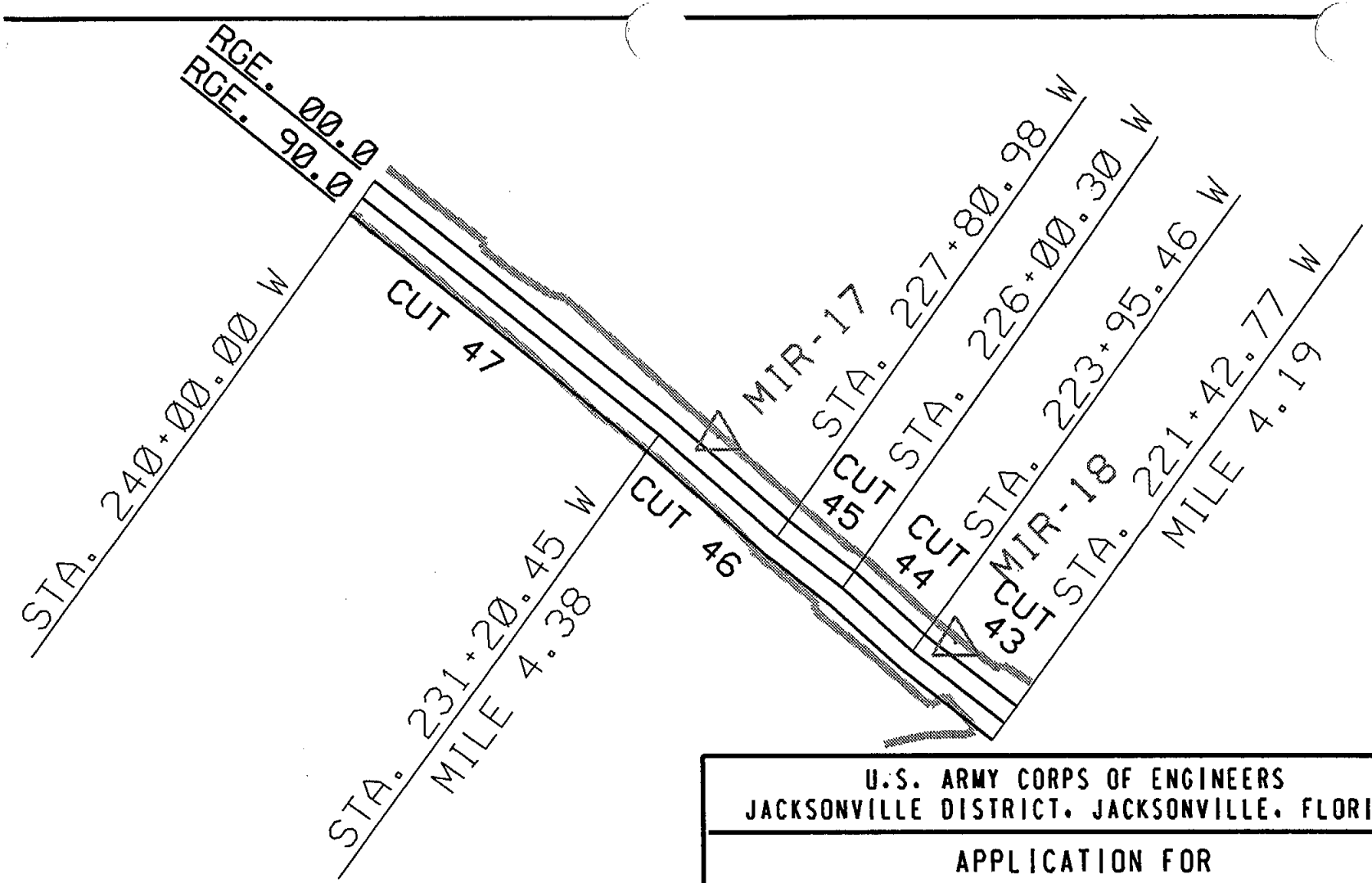


U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: CUT 42, STA 209+00.00 W
TO: MILE 4.19, CUT 42, STA 221+42.77 W

REV: NOV 00	SHEET 14 OF

PERMIT NO. 180701001



Channel Width 90 Ft.
Segment Mile 4.19 thru 5.49

SCALE

-250 0 250 500

N

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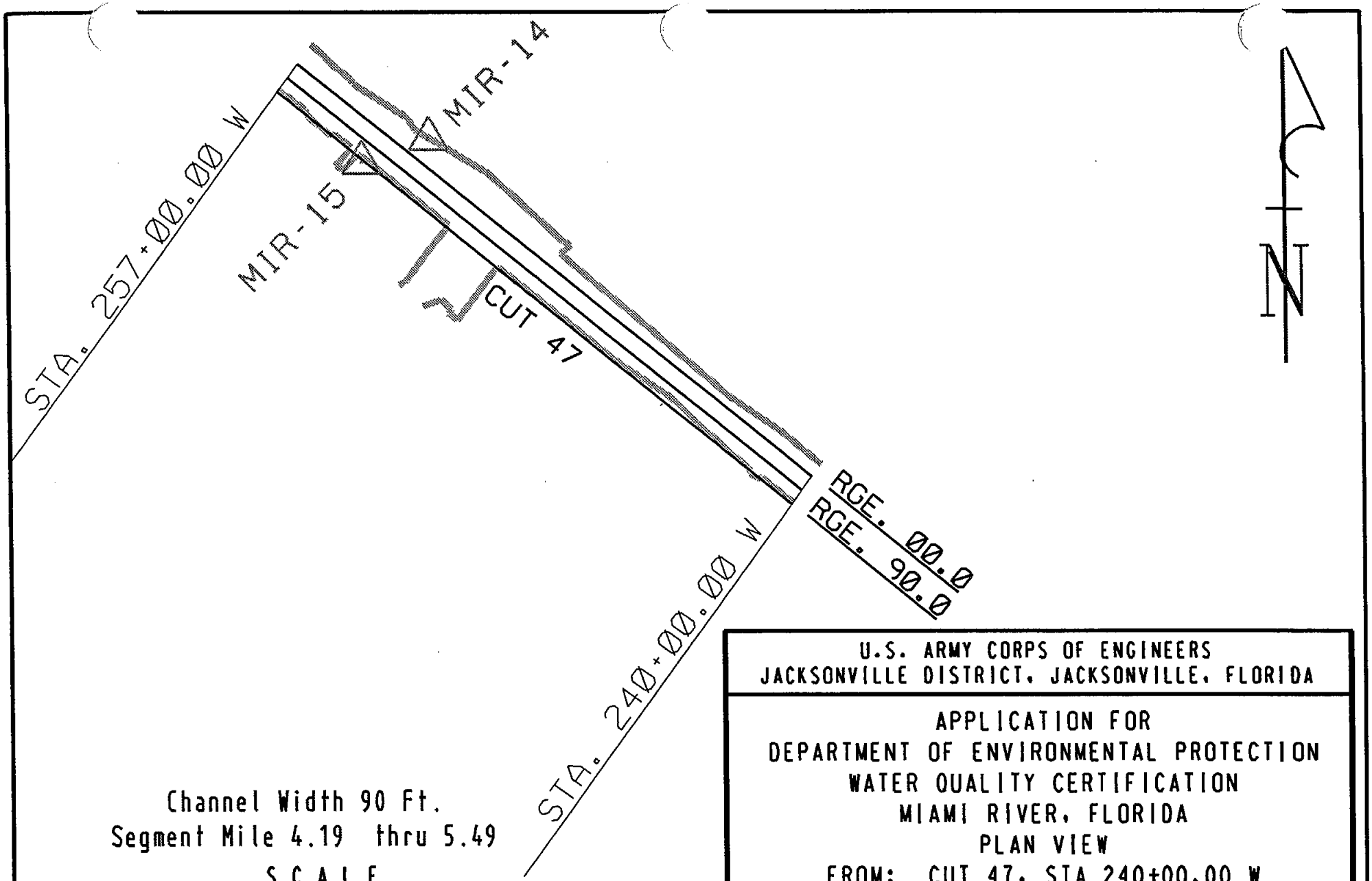
FEB 21 2001
OFFICE OF BEACHES & COASTAL SYSTEMS

U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: MILE 4.19, CUT 43, STA 221+42.77 W
TO: CUT 47, STA 240+00.00 W

REV: NOV 00	SHEET 15 OF

PERMIT NO. 180701001



Channel Width 90 Ft.
Segment Mile 4.19 thru 5.49

SCALE

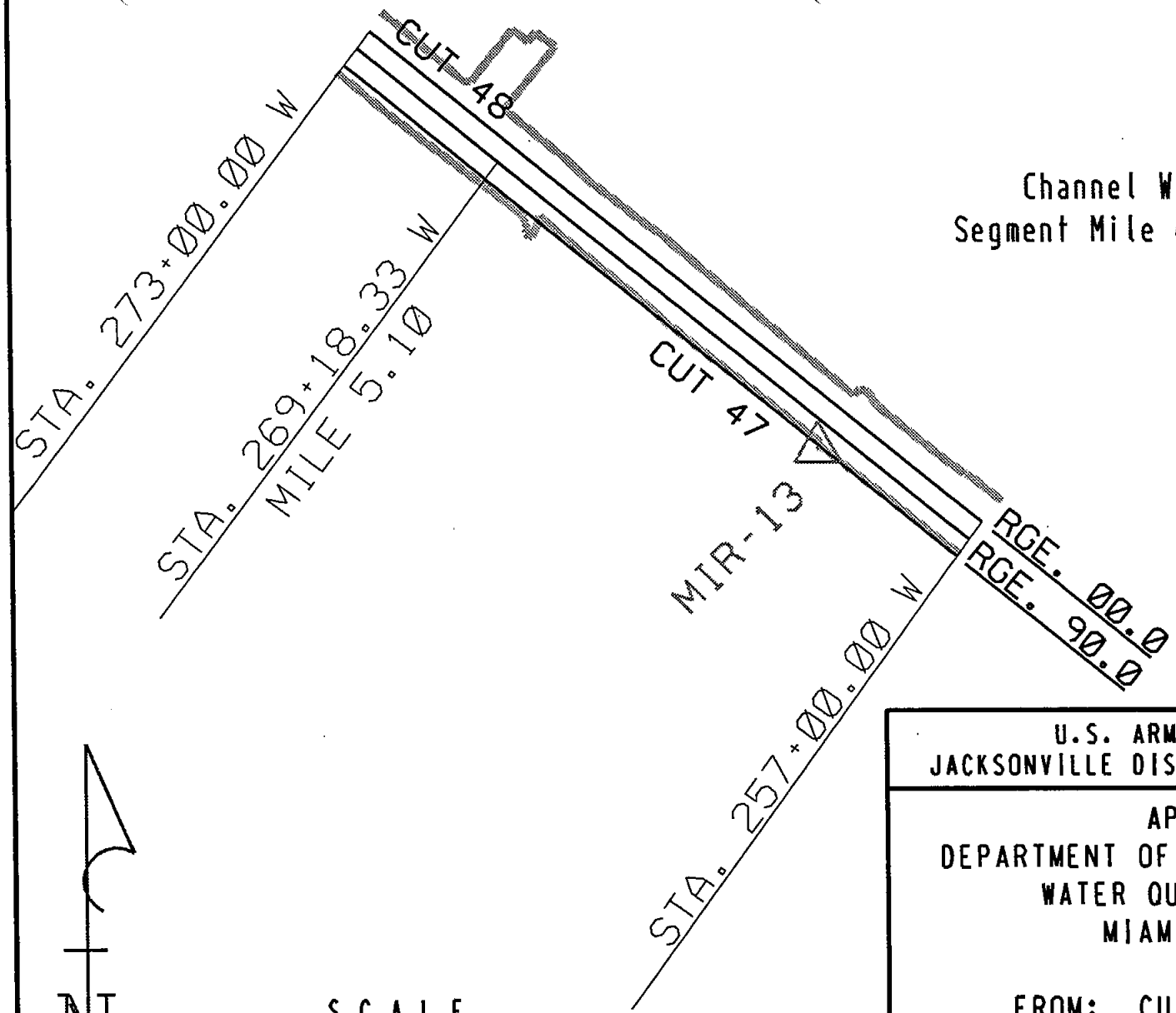
-250 0 250 500

U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: CUT 47, STA 240+00.00 W
TO: CUT 47, STA 257+00.00 W

REV: NOV 00	SHEET 16 OF

PERMIT NO. 180701001



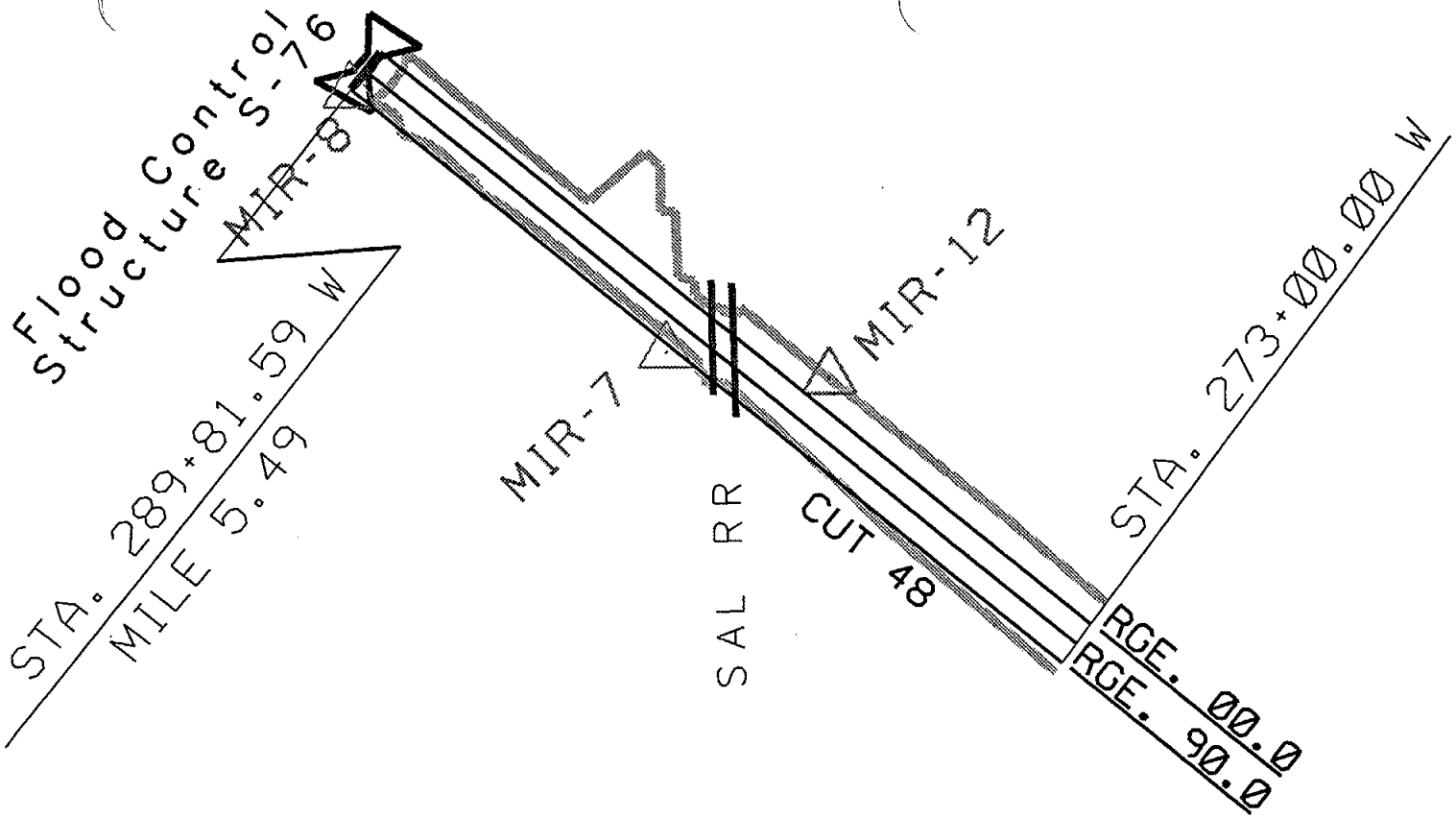
Channel Width 90 Ft.
Segment Mile 4.19 thru 5.49

U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

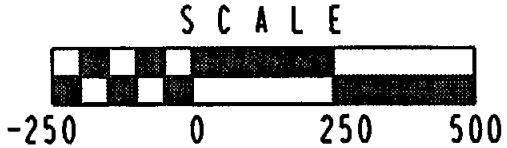
APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: CUT 47, STA 257+00.00 W
TO: CUT 48, STA 273+00.00 W

REV: NOV 00	SHEET 17 OF

PERMIT NO. 180701001



Channel Width 90 Ft.
Segment Mile 4.19 thru 5.49



OFFICE OF BEACHES & COASTAL SYSTEMS

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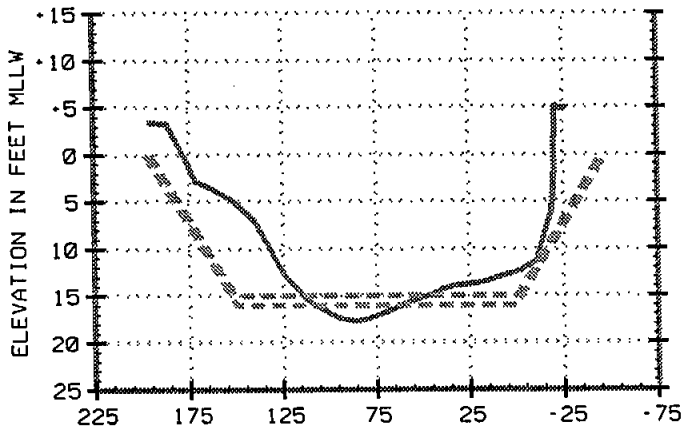
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
PLAN VIEW
FROM: CUT 48, STA 273 00.00+ W
TO: MILE 5.49, CUT48, STA 289+81.59 W

REV: NOV 00	SHEET 18 OF

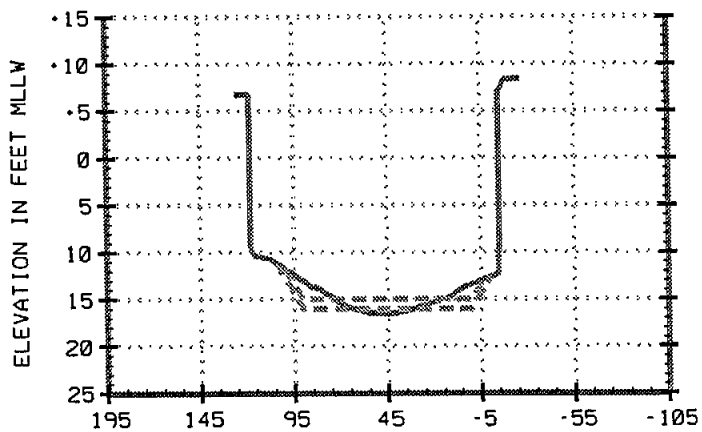
PERMIT NO. 180701001

CHANNEL WIDTH 150 FT.
SEGMENT MILE -0.25 THRU 2.93



MIAMI RIVER, CUT-13, STA 1+00

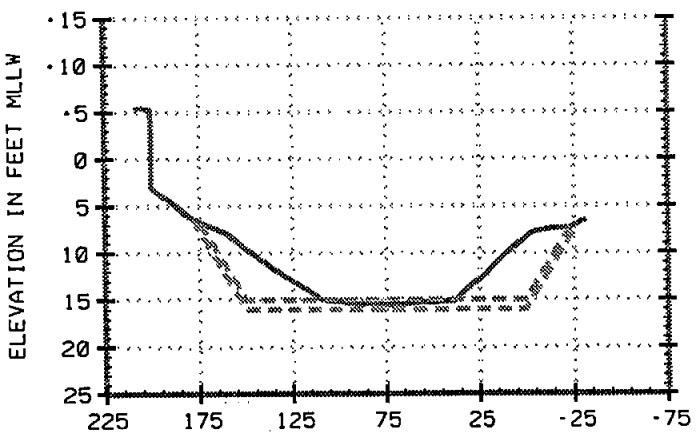
CHANNEL WIDTH 90 FT.
SEGMENT MILE 4.19 THRU 5.49



MIAMI RIVER CUT-44, STA 1+00

Note: See Specific Condition #19.

CHANNEL WIDTH 125 FT.
SEGMENT MILE 2.93 THRU 4.19



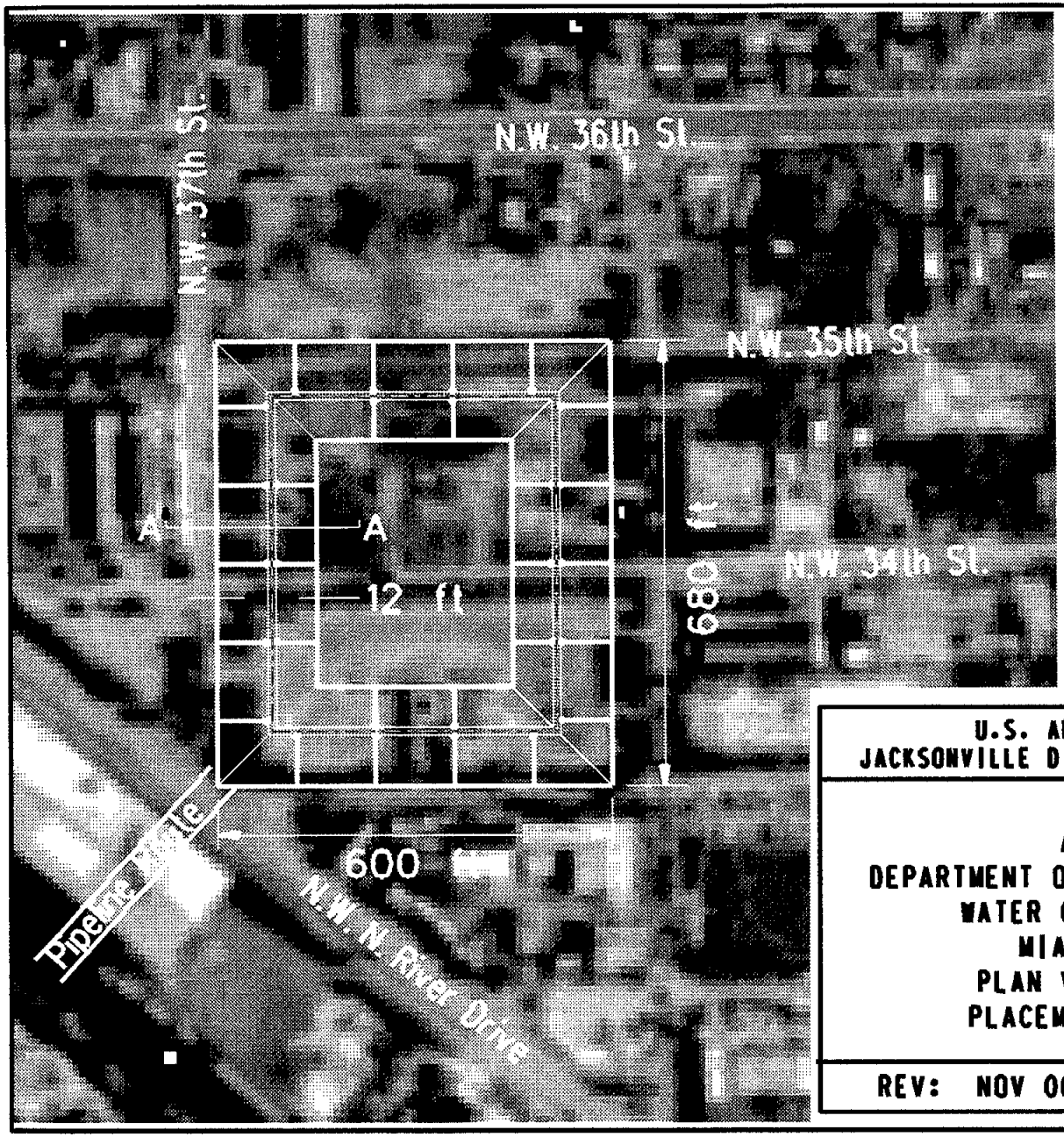
MIAMI RIVER CUT-32, STA 1+00

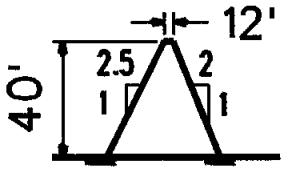
U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT, JACKSONVILLE, FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER, FLORIDA
TYPICAL CROSS SECTIONS
CUTS 13, 32 & 44

REV: NOV 00	SHEET 19 OF

PERMIT NO. 180701001





Section A A'

N

NOTE: Pipeline Route utilizes culvert that passes under NW North River Drive and factory to River.

SCALE

-200 0 200 400

U.S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT. JACKSONVILLE. FLORIDA

APPLICATION FOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION
MIAMI RIVER. FLORIDA
PLAN VIEW & CROSS SECTION
PLACEMENT AREA ON AIRPHOTO

REV: NOV 00 | SHEET 20 OF

PERMIT NO. 180701001

62-4.242 Antidegradation Permitting Requirements; Outstanding Florida Waters; Outstanding National Resource Waters; Equitable Abatement.

(1) Antidegradation Permitting Requirements.

(a) Permits shall be issued when consistent with the antidegradation policy set forth in Rule 62-302.300, F.A.C., and, if applicable, Rule 62-302.700, F.A.C.

(b) In determining whether a proposed discharge which results in water quality degradation is necessary or desirable under federal standards and under circumstances which are clearly in the public interest, the department shall consider and balance the following factors:

1. Whether the proposed project is important to and is beneficial to the public health, safety, or welfare (taking into account the policies set forth in Rules 62-302.100, 62-302.300, F.A.C., and, if applicable, Rule 62-302.700, F.A.C.); and

2. Whether the proposed discharge will adversely affect conservation of fish and wildlife, including endangered or threatened species, or their habitats; and

3. Whether the proposed discharge will adversely affect the fishing or water-based recreational values or marine productivity in the vicinity of the proposed discharge; and

4. Whether the proposed discharge is consistent with any applicable Surface Water Improvement and Management Plan that has been adopted by a Water Management District and approved by the Department.

(c) In addition to subsection (b) above, in order for a proposed discharge (other than stormwater discharges meeting the requirements of Chapter 62-25, F.A.C.), to be necessary or desirable under federal standards and under circumstances which are clearly in the public interest, the permit applicant must demonstrate that neither of the following is economically and technologically reasonable:

1. Reuse of domestic reclaimed water.

2. Use of other discharge locations, the use of land application, or reuse that would minimize or eliminate the need to lower water quality.

(2) Standards Applying to Outstanding Florida Waters.

(a) No Department permit or water quality certification shall be issued for any proposed activity or discharge within an Outstanding Florida Waters, or which significantly degrades, either alone or in combination with other stationary installations, any Outstanding Florida Waters, unless the applicant affirmatively demonstrates that:

1. With respect to blowdown from a recirculated cooling water system of a steam electrical generating plant, that the discharge:

a. Meets the applicable limitations of Rule 62-302.520(4), F.A.C., at the point of discharge; or

b. Has a mixing zone established pursuant to Rule 62-302.520(6)(b), F.A.C., which assures the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on the Outstanding Florida Water, and which is established taking into account the recreational or ecological significance of such water; and

c. Meets the temperature limits of Rule 62-302.520(4), F.A.C., at the boundary of the mixing zone established pursuant to Rule 62-302.520(6)(b), F.A.C.; or

2. The proposed activity of discharge is clearly in the public interest, and either

a. A Department permit for the activity has been issued or an application for such permit was complete on the effective date of the Outstanding Florida Water designation; or

b. The existing ambient water quality within Outstanding Florida Waters will not be lowered as a result of the proposed activity or discharge, except on a temporary basis during construction for a period not to exceed thirty days; lowered water quality would occur only within a restricted mixing zone approved by the Department; and, water quality criteria would not be violated

outside the restricted mixing zone. The Department may allow an extension of the thirty-day time limit on a construction-caused degradation for a period demonstrated by the applicant to be unavoidable and where suitable management practices and technology approved by the Department are employed to minimize any degradation of water quality.

(b) The Department recognizes that it may be necessary to permit limited activities or discharges in Outstanding Florida Waters to allow for or enhance public use or to maintain facilities that existed prior to the effective date of the Outstanding Florida Water designation, or facilities permitted after adoption of the Outstanding Florida Water designation. However, such activities or discharges will only be permitted if:

1. The discharge or activity is in compliance with the provisions specified in subparagraph (2)(a)2. of this section; or,

2. Management practices and suitable technology approved by the Department are implemented for all stationary installations including those created for drainage, flood control, or by dredging or filling; and

3. There is no alternative to the proposed activity, including the alternative of not undertaking any change, except at an unreasonably higher cost.

(c) For the purpose of this section the term "existing ambient water quality" shall mean (based on the best scientific information available) the better water quality of either (1) that which could reasonably be expected to have existed for the baseline year of an Outstanding Florida Water designation or (2) that which existed during the year prior to the date of a permit application. It shall include daily, seasonal, and other cyclic fluctuations, taking into consideration the effects of allowable discharges for which Department permits were issued or applications for such permits were filed and complete on the effective date of designation.

(d) Rule 62-4.242(2), F.A.C., shall not apply to any dredge or fill activity or any discharge to an Outstanding Florida Water permitted by the Department on, or for which a complete permit application was filed on, the effective date of an Outstanding Florida Water designation; nor shall it apply to any renewal of a Department permit where there is no modification in the dredge or fill activity or discharge which would necessitate a permit review.

(e) Any activity that is exempted from permit programs administered by the Department is not subject to the requirements of Rule 62-4.242, F.A.C.

(f) For the Apalachicola River north of Gulf County, this section shall not apply in the federally-authorized nine-foot navigation project, as follows:

1. Maintenance dredging and disposal and snag removal by the Army Corps of Engineers as presently performed pursuant to existing permits and its continuation under renewals thereof; or

2. Class A and B emergencies as defined in Rule 62-312.150(5), F.A.C.; or

3. Exemptions to permitting specified in Section 403.813, F.S., and Department rules; or

4. Any other permittable project of the Army Corps of Engineers deemed necessary by the Department pursuant to the considerations referenced in Rule 62-302.100(10)(c), F.A.C.

(3) Standards Applying to Outstanding National Resource Waters:

(a) All discharges or activities that may cause degradation of water quality in Outstanding National Resource Waters are prohibited, other than:

1. Discharges or activities that are exempted by statute from Department permitting or regulation;

2. Those discharges or activities described in Rules 62-4.242(2)(a)1.b., 62-4.242(2)(a)1.c., and 62-4.242(2)(a)2.b., F.A.C.

(b) Discharges or activities that would have the result of clearly enhancing the water quality of Outstanding National Resource Waters are not prohibited.

(c) In addition, the following restrictions apply on Outstanding National Resource Waters. Each is listed below, followed by a reference to DEP rules or Florida Statutes:

1. Water quality reclassification to a class with less stringent criteria is not allowed (Rule 62-302.400, F.A.C.).

2. New or expanded mixing zones cannot be issued other than those for thermal discharges as allowed in Rule 62-4.242(1)(a)1., F.A.C.

3. Temporary Operation Permits cannot be renewed (Rule 62-4.250, F.A.C.).

4. General Permits cannot be used.

5. Exemptions from water quality criteria cannot be issued (Rules 62-4.243; 62-6.020(5), (6), and (7); 62-25.030(3); and 62-528.300, F.A.C.).

6. Variances shall not be issued (Sections 403.201 and 403.938, F.S.).

7. Any special restrictions for water quality protection in Outstanding Florida Waters, whether in Department rules or Florida Statutes, also apply in Outstanding National Resource Waters.

(d) This subsection shall not apply to any existing activity permitted, exempted, or for which a completed application for permit was filed, on or before the effective date of the Outstanding National Resource Water designation; nor shall it apply to any renewal of a Department permit where there is no modification of the activity which would necessitate a permit review.

(e) Subparagraph 62-4.242(3)(d), F.A.C., shall not apply to any activity which contributes to the degradation of water quality in an Outstanding National Resource Water beyond those levels established for the baseline year.

(4) Equitable Abatement.

(a) It shall be Department policy to further protect and enhance the quality of those surface waters whose quality has been artificially lowered below the quality necessary to support their designated uses. For such waters, no new activity or discharge shall be issued a Department license to construct unless the applicant affirmatively demonstrates that:

1. Water quality standards once achieved would not be violated as a result of the proposed activity or discharge;

2. The proposed activity or discharge is necessary or desirable under federal standards; and

3. The proposed activity or discharge is clearly in the public interest.

(b) To allocate equitably the relative levels of responsibility for abatement among persons directly discharging significant amounts of pollutants into waters which fail to meet one or more of the water quality criteria applicable to those waters, it is necessary to determine the amounts of those pollutants contributed by each of those persons and to consider all factors relevant to the equitable allocation of that responsibility. The following provisions of this section prescribe the means by which the Department, upon the petition of a license applicant, will equitably allocate among such persons the relative levels of abatement responsibility of each for abatement of those pollutants and by which it will establish for each of those persons, if necessary, an abatement program and schedule to accomplish any abatement determined necessary under the provisions of this section.

(c)1. For a surface water body, or portion thereof, which is determined by the Department to fail to meet one or more of the water quality criteria applicable to that water body, an applicant for a license to construct or operate a stationary installation to discharge wastes which contributes, or will contribute, to that failure may petition the Department in writing for an equitable allocation of the relative levels of responsibility for abatement among the stationary installations which discharge significant amounts of one or more of the pollutants which contribute to the failure of those waters to meet the water quality criterion (a) specified in the petition.

2. The applicant shall identify in the petition the location of each of the existing stationary installations which it wishes the Department to consider and the legal name and mailing address of the owners of each of those stationary installations.

3. The county government within which each stationary installation identified under subparagraphs 1. and 2. of this paragraph **is located shall be given notice of the proceeding, as shall the municipality, if the stationary installation is located within a** municipality.

4. The Department may identify any other owners of existing stationary installations which it deems necessary to allocate equitably the relative levels of responsibility for abatement of pollutants which contribute to the failure of those waters to meet any criterion specified in the petition.

5. Those owners identified by the petitioner and the Department shall be joined as parties in the licensing proceeding. Nothing shall preclude any party from requiring the joinder, as a party to the proceeding, of the owner of any other existing stationary installation upon written motion and an affirmative demonstration that such stationary installation is discharging significant amounts of one or more pollutants which contribute to the failure of the subject water body to meet any criterion specified in the petition. A motion for joinder shall be filed within 20 days of receipt by the movant of notice that it has been joined in the proceeding.

(d) License applications filed by the petitioner, or any other party, for waste discharges which are identified pursuant to paragraph (2)(c) above in the equitable allocation process under this section shall be deemed incomplete or the subject of a dispute of material fact for purposes of Chapter 120, F.S. However, if an application for renewal of an existing license has been timely filed with the Department, the existing license shall remain in full force and effect until such time as a new or modified license has been issued pursuant to paragraph (2)(k).

(e) Prior to determining the most equitable allocation of responsibility for abatement under paragraph (f), the Department shall determine the percentage and quantification of the total contribution and the contribution by each of the stationary installations identified under paragraph (c) of the pollutants identified under paragraph (c) which contributes to the failure of the subject waters to meet the water quality criterion specified in the petition. Provided, however, that the Department, upon petition by an affected party pursuant to Section 62-3.031, F.A.C., may establish more appropriate less stringent criteria upon which to base quantification calculations. For the purpose of performing quantification calculations, the Department shall assume waste discharges entering the water body from an adjacent state as a separate point source of pollution.

(f) The following factors shall be considered by the Department in determining the most equitable allocation among the parties identified pursuant to paragraph (c) of the relative levels of responsibility of each for abatement of the pollutants with which the petition is concerned:

1. The percentage and quantification of the abatement achieved by abatement techniques previously undertaken, if any, by each of those stationary installations and the costs previously incurred, if any, with respect to each, along with any economic or production benefits gained from said abatement techniques.

2. The identification and estimated cost of alternative abatement techniques available for each stationary installation. Identified techniques shall include:

a. Those techniques which would abate the level of pollutants to the degree required by the quantities of contributed pollutants determined under paragraph (e), or the maximum degree possible, if the degree required is not presently attainable.

b. Those techniques which would abate additional quantities of pollutants beyond the quantities determined under paragraph (e) and the approximate percentage of additional abatement which could be provided.

3. The economic and production impacts of additional abatement on each party, if any.

4. Other environmental impacts of available abatement techniques.

(g) In determining the percentages and quantities under paragraph (e), the Department shall use the best scientific and technical information, methods, and data in the possession of the Department.

(h) Each party to the licensing proceeding shall provide the Department, and each other party except as provided by Section 403.111, F.S., with any information which is requested by the Department and necessary for the determination under paragraphs (e) and (f). With regard to the determination under subparagraph (f)2.ii., however, parties shall only be required to provide that information within their possession at the time of the Department's request. The Department shall make available to a party any information in its possession, and shall provide reasonable assistance to any party in identifying that information which would assist the party in complying with the Department's request.

(i) Each party shall undertake a program approved by the Department to abate the quantity of contributed pollutants for which it is determined responsible under subsection (e). Such abatement program shall include but not be limited to, a quantified effluent limitation, best management practices or specific techniques for abatement, and a schedule for commencement and completion of the required abatement. In establishing an abatement schedule, the Department shall consider the previous abatement efforts and their costs, the reasonable remaining usable life of the discharge facility, and any commitments for phasing out the discharge from the facility.

(j) An abatement program required under paragraph (i) may include the agreement of one owner to undertake additional abatement on behalf of another owner. When such an agreement has been executed fully and filed in writing with the Department within a reasonable period of time set by the Department, the agreement shall be recognized in the licenses of the signatory parties to the extent that it satisfies the levels of abatement, determined for those parties under paragraph (e).

(k) Each party shall be issued an appropriate license or modified license, which shall include any abatement program required of the party and approved under paragraph (i), as well as any other conditions authorized by Chapter 403, F.S.

Specific Authority 373.016, 373.171, 403.061, 403.062, 403.087, 403.088, 403.504, 403.704, 403.804, 403.805 FS. Law Implemented 373.016, 373.171, 403.021, 403.061, 403.087, 403.088, 403.101, 403.111, 403.121, 403.141, 403.161, 403.182, 403.502, 403.702 FS. History–New 3-1-79, Amended 5-14-81, 9-30-82, 3-31-83, 4-9-84, 11-29-84, 12-11-84, 5-8-85, 7-22-85, 8-31-88, 9-13-89, 10-4-89, Formerly 17-4.242, Amended 1-23-95.

62-4.244 Mixing Zones: Surface Waters.

(1) Zones of mixing for non-thermal components of discharges.

(a) The Department may allow the water quality adjacent to a point of discharge to be degraded to the extent that only the minimum conditions described in subsection 62-3.051(1), Florida Administrative Code, apply within a limited, defined region known as the mixing zone. Under the circumstances defined elsewhere in this section, a mixing zone may be allowed to provide an opportunity for mixing and thus to reduce the costs of treatment. However, no mixing zone or combination of mixing zones shall be allowed to significantly impair any of the designated uses of the receiving body of water.

(b) A zone of mixing shall be determined based on the following:

1. The condition of the receiving body of water including present and future flow conditions and present and future sources of pollutants.

2. The nature, volume and frequency of the proposed discharge including any possible synergistic effects with other pollutants or substances which may be present in the receiving body of water.

3. The cumulative effect of the proposed mixing zone and other mixing zones in the vicinity.

(c) Except for the thermal components of discharges and nitrogen and phosphorus acting as nutrients, mixing zones which do not adhere to all of provisions (1)(d) through (1)(j) shall be presumed to constitute a significant impairment of the designated uses of surface waters of Classes I, II and III. An applicant for a mixing zone may obtain an exemption from these limitations as follows:

1. The applicant shall provide public notice, which shall be prepared or approved by the Department, in a newspaper of general circulation in the area in which the mixing zone is proposed. The notice shall identify the specific exemption it is seeking and notice the time, date and place of a public meeting at which, if the meeting is requested, the Department will consider comments to the requested exemption. The notice shall allow a person to request such a public meeting by contacting the Department within 14 days of the publication of the notice. If there is no such request, a public meeting is not required.

2. The applicant shall arrange for a public meeting which will be held if requested at which the Department will consider public comments on the exemption that is being sought. The Department shall also provide for public notice of the meeting in the Florida Administrative Weekly.

3. The applicant shall affirmatively demonstrate to the Department that the mixing zone exemption will not produce a significant adverse effect on the established community of organisms in the receiving body of water or otherwise significantly impair any of the designated uses of the receiving body of water.

4. The applicant shall affirmatively demonstrate to the Department that the requirements of paragraph (5)(c) of this section will be met.

(d) A mixing zone shall not include an existing drinking water supply intake or any other existing water supply intake if the constituents of such mixing zone would significantly impair the purposes for which the supply is used.

(e) A mixing zone shall not include a nursery area of indigenous aquatic life or any area approved by the Department of Environmental Protection for shellfish harvesting.

(f) In canals, rivers, streams, and other similar water bodies, the maximum length of a mixing zone shall be no more than 800 meters. In no case shall a mixing zone be larger than is necessary for the discharge to completely mix with the receiving water to meet water quality standards, and in no case shall a mixing zone significantly impair the designated use of the water body other than within the boundaries of the mixing zone.

(g) In lakes, estuaries, bays, lagoons, bayous, sounds, and coastal waters, the area of mixing zone shall be 125,600 square meters unless a lesser area is necessary to prevent significant impairment of a designated use. In no case shall a mixing zone be larger than is necessary to meet water quality standards.

(h) In open ocean waters, the area of a mixing zone shall be 502,655 square meters unless a lesser area is necessary to prevent significant impairment of a designated use. In no case shall a mixing zone be larger than is necessary to meet water quality standards.

(i) The mixing zones in a given water body shall not cumulatively exceed the limits described below:

1. In rivers, canals, and streams, and tributaries thereto and other similar water bodies: 10% of the total length;

2. In lakes, estuaries, bays, lagoons, bayous and sounds: 10% of the total area.

(j) Additional standards which apply within mixing zones in Class I, II and Class III water are as follows:

1. The dissolved oxygen shall not average less than 4.0 milligrams per liter; and

2. The turbidity shall not average greater than 41 Nephelometric Turbidity Units above natural background.

(k) Mixing zones in Class IV and V waters are subject only to the provisions of subsection (d) above and of Rule 62-3.051, F.A.C., and shall not significantly impair the designated uses of the receiving body of water.

(2) There shall be no mixing zone for any component of any discharge unless a Department permit containing a description of its boundaries has been issued for that component of the discharge.

(3)(a) Waters within mixing zones shall not be degraded below the minimum standards prescribed for all waters at all times in Rule 62-302.500, F.A.C. In determining compliance with the provisions of Rule 62-302.500(1), F.A.C., the average concentration of the wastes in the mixing zone shall be measured or computed using generally accepted scientific techniques provided that, the maximum concentration of wastes in the mixing zone shall not exceed the amount lethal to 50% of the test organisms in 96 hours (96 hr. LC_{50}) for a species significant to the indigenous aquatic community, except as provided in paragraphs (b) or (c) below. The dissolved oxygen value within any mixing zone shall not be less than 1.5 milligrams per liter at any time or place, except for an open ocean discharge which must be above 1.5 milligrams per liter within 20 feet of the outfall structure.

(b) The maximum concentration of wastes in the mixing zone (except for open ocean discharges) may exceed the 96 hr. LC_{50} only when all of the following conditions are satisfied.

1. Dilution ratio of the effluent exceeds 100:1 under critical conditions. That is, flow in the receiving waters exceeds 100 units for every unit of effluent flow under critical conditions. Critical conditions are defined as those under which least dilution of the effluent is expected, e.g., maximum effluent flow and minimum receiving stream flow.

2. High rate diffusers or other similar means are used to induce rapid initial mixing of the effluent with the receiving waters such that exposure of organisms to lethal concentrations is minimized.

3. Toxicity must be less than acute [as defined in Rule 62-3.021(1), F.A.C.] no more than a distance of 50 times the discharge length scale in any spatial direction. The discharge length scale is defined as the square root of the cross-sectional area of any discharge outlet. In the case of a multiport diffuser, this requirement must be met for each port, using the appropriate discharge length scale for that port. This restriction will ensure a dilution factor of at least 10 within this distance under all possible circumstances, including situations of severe bottom interaction, surface interaction, or lateral merging.

4. The effluent when diluted to 30% of full strength, shall not cause more than 50% mortality in 96 hours (96 hr. LC_{50}) in a species significant to the indigenous aquatic community.

5. If the following pollutants are present in the effluent, their concentrations (in the effluent) shall not exceed the values listed:

Acrylonitrile 65 ug/l
Aldrin 7.5 ng/l
Dieldrin 7.5 ng/l
Benzene 4 mg/l
Benzidine 53 ng/l
Beryllium 6.4 ug/l
Cadmium 100 ug/l
Carbon Tetrachloride 694 ug/l
Chlordane 48 ng/l
Chlorinated ethanes:
    1,2-dichloroethane 24.3 mg/l
    1,1,2-trichloroethane 4.2 mg/l
    1,1,2,2-tetrachloroethane 1 mg/l
Hexachloroethane 874 ug/l
Chloroalkyl Ethers:
    bis(chloromethyl) ether 184 ng/l
    bis(2-chloroethyl) ether 136 ug/l
Chloroform 1.57 mg/l
Chromium (hexavalent) 0.5 mg/l
DDT 2.4 ug/l
Dichlorobenzidine 2 ug/l
1,1-Dichloroethylene 185 ug/l
Dinitrotoluene 11 ug/l
Diphenylydrazine 56 ug/l
Ethylbenzene 33 mg/l
Fluoranthene 540 ug/l

Halomethanes 1.6 mg/l
Heptachlor 29 ng/l
Hexachlorobenzene 74 ng/l
Hexachlorocyclohexane
αHexachlorocyclohexane 310 ng/l
βHexachlorocyclohexane 547 ng/l
γHexachlorocyclohexane 625 ng/l
Lead 0.5 mg/l
Mercury 1.5 ug/l
Nickel 1 mg/l
Nitrosamines 124 ug/l
Polynuclear aromatic hydrocarbons 3 ug/l
Polychlorinated biphenyls (PCBs) 8 ng/l
Selenium 100 ug/l
Tetrachloroethylene 885 ug/l
Thallium 480 ug/l
Toxaphene 73 ng/l
Trichloroethylene 8 mg/l
Vinyl Chloride 52 mg/l

(c) For open ocean discharges:

1. The effluent, when diluted to 30% full strength with water having a salinity representative of the average receiving-water's salinity, shall not cause more than 50% mortality in 96 hours (96-hr. LC_{50}) in a species significant to the indigenous aquatic community.

2. Rapid dilution shall be ensured by the use of multiport diffusers, or a single port outfall designed (by a professional engineer registered in Florida) to achieve a minimum of 20:1 dilution of the effluent prior to reaching the surface. This dilution shall be determined using the appropriate plume model described in the EPA document, "Initial Mixing Characteristics of Municipal Ocean Discharges: Volume 1. Procedures and Applications," using the "Single plume, stagnant ambient" procedures or current speeds as established by field measurements. Miami-Dade Central District, Miami-Dade North District, City of Hollywood, and Broward County may use 12.3 cm/sec as a default value for ambient current speed at the present location of their respective outfalls. Alternatively, dilution studies for facilities not using the "Single plume, stagnant ambient" procedures or the 12.3 cm/sec default ambient current speed (as appropriate) shall be conducted in accordance with a site-specific Department approved Plan of Study. The Plan of Study shall be approved upon a demonstration by the applicant that the plan will produce data to characterize the daily, seasonal, and annual fluctuations in current speed and direction. The discharge shall otherwise comply with federal law.

3. For open ocean dischargers that comply with the requirements of Rule 62-4.244(3)(c)1. and 2., F.A.C., compliance with applicable water quality criteria specified in Rule 62-302.530, F.A.C. (criteria), must be achieved by the point the discharge attains 20:1 dilution rather than at the point of discharge. Mixing zones shall not be necessary for any parameter that requires 20:1 dilution or less to attain criteria. However, effluent limitations will be set by permit, and dilutions will be granted up to 20:1 in these limitations, for parameters that exceed criteria at the end-of-pipe.

a. The demonstration of required dilution shall be determined by the ratio of the worst case effluent concentration (WCEC) minus the worst case background concentration to the criterion minus the worst case background concentration, i.e.:

$$\frac{\text{(Worst case effluent concentration} - \text{Worst case background concentration)}}{\text{(Criterion} - \text{Worst case background concentration)}}$$

b. The WCEC for parameters that exceed criteria in the effluent shall be the 95th percentile effluent concentration (of DMR or other data collected in accordance with the sampling requirements of the permit measured for the most recent 3-year monitoring period, at the time of permit renewal) for each such parameter and not based on the maximum amount of dilution available. The WCEC used to demonstrate the required dilution for a parameter shall also be used as a facility performance check for each such parameter. Any exceedance of the WCEC shall provide sufficient cause for the Department to re-evaluate the applicability of this section and revise the permit. Additionally, any measured value(s) of sufficient concentration to require greater than 20:1 dilution to attain criteria shall be considered as a violation of the permit.

4. Rule 62-4.244(3)(c)3., F.A.C., does not apply to bacterial criteria or silver in marine waters.

(4) Except for the minimum conditions of waters as specified in Section 62-3.051, F.A.C., and the provisions of Section 62-4.244, F.A.C., no other water quality criteria apply within a mixing zone.

(5) Mixing zones for dredge and fill permits shall not be subject to provisions (1)(c) through (1)(j), (2), (3), or (4) of this section, provided that applicable water quality standards are met at the boundary and outside the mixing zone.

(a) The dimensions of dredge and fill mixing zones shall be proposed by the applicant and approved, modified or denied by the Department.

(b) Criteria for departmental evaluation of a proposed mixing zone shall include site-specific biological and hydrographic or hydrological considerations.

(c) In no case shall the boundary of a dredge and fill mixing zone be more than 150 meters downstream in flowing streams or 150 meters in radius in other bodies of water, where these distances are measured from the cutterhead, return flow, discharge, or other points of generation of turbidity or other pollutants.

(6) Where a receiving body of water fails to meet a water quality standard for pollutants set forth in department rules, a steam electric generating plant discharge of pollutants that existed or was licensed on July 1, 1984, may be granted a mixing zone, provided that:

(a) The standard would not be met in the water body in the absence of the discharge; and

(b) The discharge is in compliance with all applicable technology-based effluent limitations; and

(c) The discharge does not cause a measurable increase in the degree of noncompliance with the standard at the boundary of the mixing zone; and

(d) The discharge otherwise complies with the mixing zone provisions specified in this section.

(7) Additional relief from mixing zone restrictions necessary to prevent significant impairment of a designated use is through:

(a) Reclassification of the water body pursuant to Rule 62-3.081, Florida Administrative Code;

(b) Variance granted pursuant to Section 403.201, F.S., and Rule 62-103.100, F.A.C.

(c) Modification of the requirements of this section for specific criteria by the Secretary upon compliance with the notice and hearing requirements for mixing zones existing on the effective date of this rule complies with best technology economically achievable, best management practices, or other requirements set forth in Chapter 62-6, F.A.C., and the economic, environmental and social costs of compliance with the existing criteria outweigh the social, environmental, and economic benefits of compliance **with more stringent discharge limitations necessary to comply with mixing zone requirements of subsection 62-4.244(1), F.A.C.,** and the provisions relating to dissolved oxygen in Rule 62-4.244, F.A.C.

1. No discharger may be issued more than one permit or permit modification or renewal which allows a modification pursuant to this subsection unless the applicant affirmatively demonstrates that it has undertaken a continuing program, approved by the Department, designed to consider water quality conditions and review or develop any reasonable means of achieving compliance with the water quality criteria from which relief has been granted pursuant to this subsection.

2. With respect to paragraphs 62-4.244(1)(c) and 62-4.244(7)(c), F.A.C., the applicant must affirmatively demonstrate the minimum area of the water body necessary to achieve compliance with either subsection. Within a minimum area determined by the Secretary to be necessary to achieve compliance, the discharger shall be exempt from the criterion for which a demonstration has been made.

(d) Whenever site specific alternative criteria are established pursuant to Rule 62-3.031, Florida Administrative Code, or paragraph 62-3.061(2)(g), Florida Administrative Code, a mixing zone may be issued for dissolved oxygen if all provisions of Rule 62-4.244, Florida Administrative Code are met with the exception of subparagraph 62-4.244(1)(j)1., Florida Administrative Code.

Specific Authority 403.051, 403.061, 403.062, 403.087, 403.804, 403.805 FS. Law Implemented 403.021, 403.051, 403.061, 403.087, 403.088, 403.101, 403.121, 403.141, 403.161, 403.182, 403.201, 403.502, 403.702, 403.708 FS. History–Formerly part of 17-3.05, Revised and Renumbered 3-1-79, Amended 10-2-80, 1-1-83, 2-1-83, 2-19-84, 4-26-87, 8-31-88, 10-17-90, Formerly 17-4.244, Amended 3-26-00.

62-4.246 Sampling, Testing Methods, and Method Detection Limits for Water Pollution Sources.

(1) The Department shall require monitoring and sampling for pollutants reasonably expected to be contained in the discharge and to violate the water quality criteria in Chapter 62-302, F.A.C.

(2) Field testing, sample collection and preservation, laboratory testing, including quality control procedures, and all record keeping shall comply with Chapter 62-160, F.A.C.

(3) Subsections (4)-(11) of this rule apply only to permit applications, permits, monitoring reports, and other sources of data relating to discharges to surface waters.

(4) Using generally accepted scientific procedures, the Department shall establish and publish a method detection limit (MDL) and practical quantification limit (PQL) for each approved analytical method for a parameter (including any pollutant). On request, the Department shall make available a list of all current established MDLs and PQLs. The permittee may request and the Department shall consider approval for alternative methods or for alternative MDLs and PQLs for any approved analytical method, in accordance with the criteria of Rules 62-160.520 (New Methods, Validation Requirements) and 62-160.530 (Approval of Alternate Test Procedures), F.A.C. Permit applications, permits, and monitoring reports shall specify the applicable MDL and PQL established by the Department for each pertinent parameter.

(5) When establishing effluent limits in accordance with Rule 62-650, F.A.C. for pollutants for which MDLs are higher than the established water quality criteria, the Department shall base the limits on concentrations in the receiving waters computed in accordance with generally accepted scientific procedures and with subsections (8), (10) and (11) of this section. Permit applications and monitoring reports shall identify results below the MDL. Except as specified in subsections (8) and (10) below, such results shall demonstrate compliance for that pollutant.

(6) All results submitted to the Department for permit applications and monitoring shall be reported as follows.